

COLLEGE OF CAPE TOWN



higher education
& training
Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA



CONTRACT NUMBER CCT042025

ATHLONE CAMPUS WORKSHOP CLADDING

REQUEST FOR QUOTATION

BID DOCUMENT

CLOSING DATE: 04 NOVEMBER 2025 @11:00

SITE VISIT: 28 OCTOBER 2025 @11:00 (ATHLONECAMPUS)

Issued by:

The College of Cape Town
PO Box 726
CAPE TOWN
7925

NAME OF BIDDER:

TOTAL BID PRICE (INCL. VAT):

PREFERENCE / B-BBEE GRADING:

CENTRAL SUPPLIER DATABASE NO:

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BID

This part of the BID DOCUMENT consists of the following two sections:

- **Part T1: Bidding Procedures**

This section details the:

- bid notice and invitation to bid (white pages); and
- evaluation criteria (pink pages).

- **Part T2: Returnable Documents**

This section details the:

- list of returnable documents (yellow pages); and
- returnable schedules (yellow pages).

PART T1 BIDDING PROCEDURES

T1.1 BID NOTICE AND INVITATION TO BID

<p>The College of Cape Town invites bids for the cladding of workshops with suitable IBR profiles metal sheeting at the Athlone Campus as well as the replacement of identified roofing and roof drainage systems.</p> <p>The technical requirements and specifications for the scope of works is fully stated in the bid documentation.</p>	
Minimum Contractor CIDB Grading Required	It is estimated that Bidders must have a CIDB contractor grading designation of 2CE/GB or higher
Contracting Strategy	JBCC Minor Works
Classification	Specialist Work
Procurement Procedure	Single volume approach.
Awarding Strategy	The maximum number of suppliers to be awarded this bid is <u>one (01)</u> .
Bid Submission	Original Bids must be submitted by the stipulated date and time to the address stipulated in the bid document.
Bid Validity	Validity period of not more than 45 (forty five) days is required from closing date of this RFQ.
	The College of Cape Town reserves the right to extend the validity period.
Subcontracting	Where CIDB related works are subcontracted, each Subcontractor must also be registered with the appropriate CIDB grading Designations in accordance with the value of the work to be undertaken by that Subcontractor.

NOTE: This document is a REQUEST FOR QUOTATION (RFQ), any reference to BID or BIDS within this document will refer to the RFQ being submitted.

T1.2 BID DATA

The conditions of this bid are the Standard Conditions of Tender as contained in the document CIDB Standard for Uniformity in Engineering and Construction Works Contracts (*August 2019*) Annexure C and may be obtained from the CIDB

The Standard Conditions of Tender for Procurement make several references to the Tender Data for details that apply specifically to this bid. The Bid Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

Each item of data given below is cross-referenced to the Clause in the CIDB Standard Conditions of Bid to which it mainly applies.

CLAUSE NUMBER (CIDB)	BID DATA
F.1.1	The Employer is The College of Cape Town TVET College .
F.1.4	The Employer's Representative is AFI Consult (Pty) Ltd .
F.1.5	The Employer is not obliged to accept the lowest or any bid and will consider the bidder scoring the highest number of points in line with the set criteria.
F.1.6.3	The Employer shall evaluate this bid in accordance with the evaluation criteria stated in this bid.
F.2.7	A compulsory site clarification meeting will be held as stated in the bid document.

T1.3 EVALUATION CRITERIA

T1.3.1 TEST FOR RESPONSIVENESS/ PRE-QUALIFICATION

1. Fully completed and signed certificate of attendance at compulsory clarification meeting.
2. Fully completed and signed local content declaration forms.
3. Letter of good standing from the Department of Labour or an Accredited Institution.
4. Fully completed and signed schedule of bidders' experience.
5. Fully complete and signed Form of Offer and Acceptance.
6. Bid Documentation must be complete and signed in all respects.

T1.3.2 FUNCTIONALITY EVALUATION

The bid will be evaluated based on the submitted price as well as the criteria set out in the table below.

NO.	CRITERIA	WEIGHT
1.	Bidder's Experience	
	Successful completion of similar projects (in nature and value). Bidders should attach Completion Certificates, an Appointment and Reference letters for completed projects in order to qualify for points. (Maximum of 40 points can be awarded) 10 points can be scored for each confirmed similar project completed. Similar projects are building projects similar in nature.	40

NO.	CRITERIA	WEIGHT
2.	Key Personnel: Site Agent / Contracts Manager	
	<p>Site Agent / Contracts Manager with the following Qualifications:</p> <ul style="list-style-type: none"> a) No experience or less than 1-year experience (0), or b) Approved 3yr Degree / Diploma in the built environment with less than 2 years relevant experience in the position (6), or c) Approved 3yr Degree / Diploma in the built environment with more than 2 years relevant experience in the position (15), or d) No qualification with 1 - 2 years relevant experience in the position (3), or e) No qualification with more than 2 - 5 years relevant experience in the position (6), or f) No qualification with more than 5 – 7 years relevant experience in the position (9), or g) No qualification with more than 7 – 10 years relevant experience in the position (12), or h) More than 10 years relevant experience in the position (15). <p>CV's and certified copies of academic qualifications of the proposed Site Agent / Contractor Manager must be submitted.</p>	15
3.	Key Personnel: General Foreman	
	<p>General Foreman with the following experience:</p> <ul style="list-style-type: none"> a) No experience or less than 1-year experience (0), or b) Approved 3yr Degree / Diploma in the built environment with less than 2 years relevant experience in the position (6), or c) Approved 3yr Degree / Diploma in the built environment with more than 2 years relevant experience in the position (15), or d) No experience (0), or e) Less than 2 years relevant experience in the position (2), or f) 2 years - 4 years of experience in the position (4), or g) More than 4 years - 6 years relevant experience in the position (6), or h) More than 6 years - 8 years relevant experience in the position (8), or i) More than 8 years relevant experience in the position (10), or <p>CV's and certified copies of academic qualifications of the proposed general foreman must be submitted.</p>	15
4.	Preliminary Construction Programme	
	<p>Comprehensive Preliminary Construction Programme to include Scope of Work. The Programme should highlight all the planned activities, the sequence of executing the works and the completion timeframes of the activities. Furthermore, the Programme must demonstrate the applicant's approach and allocation of resources to achieve task within timeframes.</p> <p>Depending on the following factors:</p> <ul style="list-style-type: none"> i) Logic of the sequencing of construction activities and in line with the cash flow. ii) Practicality of the completion timeframes of the respective activities. <p>The programmes shall be ranked in the following order, with the highest ranking qualifying for the maximum points:</p> <p>Good (Fully complies with requisite (i) and (ii) above) - (20).</p> <p>Average (Partly complies with requisite (i) and (ii) above) - (10).</p> <p>Poor (Does not comply with requisite (i) and (ii) above) - (0) .</p>	20

NO.	CRITERIA	WEIGHT
5.	Bank Rating	
	<p>The evaluation of the Bidder's bank rating will be done as follows, based on the information provided within returnable documentation:</p> <p>"A" Bank Rating 10</p> <p>"B" Bank Rating 8</p> <p>"C" Bank Rating 6</p> <p>"D" Bank Rating 4</p> <p>"E" Bank Rating Non-Responsive</p> <p>Provide Bidder's qualifying bank rating for claiming points.</p>	10
TOTAL		100

Responses are required to meet a **minimum of 70** percent to be further evaluated.

T1.3.3. PREFERENCE POINT SYSTEM

The (80/20) Preferential Point System will be used to evaluate price and preference on this quotation

PART T2 RETURNABLE DOCUMENTS

The following returnable documents are compulsory and is to be provided.

T2.1: LIST OF RETURNABLE DOCUMENTS

REF	DESCRIPTION
MBD1	INVITATION TO BID
A	CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING
B	RECORD OF ADDENDA TO BID DOCUMENTS
C	CERTIFICATE OF AUTHORITY OF AN ENTITY
D	REGISTRATION CERTIFICATES OF AN ENTITY
D1	CSD REGISTRATION
E	DECLARATION OF INTEREST (MBD 4)
F	LOCAL CONTENT – MBD 6.2
G	CERTIFICATE OF INDEPENDENT BID DETERMINATION (MBD 9)
H	AFFADAVIT OF GOOD STANDING
I	BANKING DETAILS
J	DECLARATION OF FINANCIAL CAPACITY
K	SCHEDULE OF THE BIDDER'S EXPERIENCE
L	KEY PERSONNEL
M	CURRICULUM VITAE OF KEY PERSONNEL (SITE AGENT / CONTRACT MANAGER)
M1	CURRICULUM VITAE OF KEY PERSONNEL (GENERAL FOREMAN)
M2	CURRICULUM VITAE OF KEY PERSONNEL (SHE OFFICER)
N	SCHEDULE OF PROPOSED SUB-CONTRACTORS (PROOF AS REGISTERED ASBESTOS CONTRACTOR TO BE ATTACHED IN RESPECT OF ASBESTOS WORKS)
O	PROVISIONAL PROGRAMME
P	WORKMAN'S COMPENSATION REGISTRATION
Q	TAX CLEARANCE CERTIFICATE
R	DECLARATION OF PAST SUPPLY CHAIN (MBD8)
S	DECLARATION OF SOLVENCY OR LIQUIDITY
T	CONTRACTOR'S HEALTH & SAFETY DECLARATION
U	PROFORMA FORMS TO BE COMPLETED
U1	PERFORMANCE GUARANTEE

T2.2: RETURNABLE SCHEDULES AND FORMS

PART A INVITATION TO BID

MBD1

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF COLLEGE OF CAPE TOWN TVET COLLEGE:					
BID NUMBER:	CCT042025	CLOSING DATE:	04 NOVEMBER 2025	CLOSING TIME:	11:00
DESCRIPTION:	The College of Cape Town, Athlone Campus Workshop Cladding				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7)					
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
The College of Cape Town TVET College					
Central Office					
334 Albert Road, Salt River					
Cape Town, South Africa, 7925					
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE:		NUMBER:		
CELLPHONE NUMBER					
FAX NUMBER		CODE:		NUMBER:	
EMAIL ADDRESS					
VAT REG. NUMBER					
TAX COMPLIANCE STATUS	TCS PIN:		OR	CSD NO.:	
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE (TICK APPLICABLE BOX)	<input type="checkbox"/> YES <input type="checkbox"/> NO		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		<input type="checkbox"/> YES <input type="checkbox"/> NO
(A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE)					
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS/SERVICES/WORKS OFFERED?	<input type="checkbox"/> YES <input type="checkbox"/> NO		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS/SERVICES/WORKS OFFERED		<input type="checkbox"/> YES <input type="checkbox"/> NO (If Yes, Answer Part B3)
TOTAL NUMBER OF ITEMS OFFERED			TOTAL BID PRICE		R
SIGNATURE OF BIDDER			DATE		
CAPACITY UNDER WHICH THIS BID IS SIGNED					
Bidding Procedure Enquiries May Be Directed To:			Technical Information May Be Directed To:		
DEPARTMENT	SCM College of Cape Town		COMPANY		AFI Consult (Pty) Ltd
CONTACT PERSON	[Ms N. Shiundlane]		CONTACT PERSON		Mr O. Bergh
TELEPHONE NUMBER	[0214046700]		TELEPHONE NUMBER		082 894 1684
E-MAIL ADDRESS	[nshiundlane@cct.edu.za]		E-MAIL ADDRESS		oloff@aficonsult.co.za

TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:
<p>1.1. Bid must be delivered by the stipulated time to the correct address. late bids will not be accepted for consideration.</p> <p>1.2. All bids must be submitted on the official forms provided – (not to be re-typed) or online.</p> <p>1.3. This bid is subject to the preferential procurement policy framework act and the preferential procurement regulations, 2017, the joint building contracts committee conditions of contract (JBCC) Minor Works Agreement: Edition 5.2, of May 2018 and, if applicable, any other special conditions of contract.</p>
2. TAX COMPLIANCE REQUIREMENTS:
<p>2.1. Bidders must ensure compliance with their tax obligations.</p> <p>2.2. Bidders are required to submit their unique personal identification number (pin) issued by SARS to enable the organ of state to view the taxpayer's and tax status.</p> <p>2.3. Application for the tax compliance status (TCS) certificate or pin may also be made via e-filing in order to use this provision, taxpayers will need to register with SARS as e-filers through the website WWW.SARS.GOV.ZA.</p> <p>2.4. Foreign suppliers must complete the pre-award questionnaire in part b3.</p> <p>2.5. Bidders may also submit a printed TCS certificate together with the bid.</p> <p>2.6. In bids where consortia/joint ventures/sub-contractors are involved; each party must submit a separate TCS certificate/pin/CSD number.</p> <p>2.7. Where no TCS is available, but the bidder is registered on the central supplier database (CSD), a CSD number must be provided.</p>
3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS
<p>3.1. Is the entity a resident of the Republic of South Africa (RSA) ?.....(YES/NO)</p> <p>3.2. Does the entity have a branch in the RSA?.....(YES/NO)</p> <p>3.3. Does the entity have a permanent establishment in the RSA?(YES/NO)</p> <p>3.4. Does the entity have any source of income in the RSA?.....(YES/NO)</p> <p>3.5. Is the entity liable in the RSA for any form of Taxation?.....(YES/NO)</p> <p>If the answer is "no" to all of the above, then it is not a requirement to register for a TAX compliance status system pin code from the South African Revenue Service (SARS) and if not register as per 2.3 above.</p>

NB: FAILURE TO PROVIDE ANY ON THE ABOVE PARTICULARS MAY RENDER THE BID INVALID. NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:

DATE:

A: CERTIFICATE OF ATTENDANCE AT CLARIFICATION MEETING

This is to certify that (Bidder)

of (address).....

..... was represented by the person(s) named below at the compulsory clarification meeting held for all Bidders on the date as specified in the Bid advert & Bid data.

We acknowledge that the purpose of the meeting was to acquaint myself / ourselves with the site of the works and / or matters incidental to doing the work specified in the Bid documents in order for me / us to take account of everything necessary when compiling our rates and prices included in the Bid.

Particulars of person(s) attending the meeting:

Name: Signature:

Capacity:.....

Name: Signature:

Capacity:.....

Attendance of the above person(s) at the meeting is confirmed by the Employer's representative, namely:

Name: Signature:

Capacity: Date and Time:

B: RECORD OF ADDENDA TO BID DOCUMENTS

We confirm that the following communications received from the Employer before the date of submission of this Bid offer, amending the Bid documents, have been taken into account in this Bid offer.

ADDNO	DATE	TITLE OR DETAILS
1		
2		
3		
4		
5		

Signature: Date:

(of person authorised to sign on behalf of the Bidder)

C: CERTIFICATE OF AUTHORITY OF AN ENTITY

[Indicate the status of the Bidder by ticking the appropriate box hereunder. The Bidder must complete the certificate set out below for the relevant category.]

(I) Company	(II) Close Corporation	(III) Partnership	(IV) Joint Venture	(V) Sole Proprietor

(I) CERTIFICATE FOR COMPANY

I, chairperson of the Board of Directors of
....., hereby confirm by resolution of the Board
(copy attached) taken on 20....., that
Mr/Ms, acting in the capacity of
....., was authorised to sign all documents in
connection with this Bid and any contract resulting from it on behalf of the company.

Signature of Chairman:

Signature of Signatory:

As Witnesses:

1..... Name in Block Letters.....

2..... Name in Block Letters.....

Date:

(II) CERTIFICATE FOR CLOSE CORPORATION

We, the undersigned, being the key members in the business trading as

.....hereby authorise Mr/Ms
acting in the capacity of, to sign all
documents in connection with the Bid for Contract No
..... and any contract resulting from it on our
behalf.

Signature of Signatory:

As Witnesses:

1..... Name in Block Letters.....

2..... Name in Block Letters.....

Date:

NAME	ADDRESS	SIGNATURE	DATE
		
		
		
		
		

Note: *This certificate is to be completed and signed by all of the key members upon whom rests the direction of the affairs of the Close Corporation as a whole.*

(III) CERTIFICATE FOR PARTNERSHIP

We, the undersigned, being the key partners in the business trading as,

.....hereby authorise

Mr/Ms.....acting in the capacity of

....., to sign all documents in connection
with the Bid for Contract No and any contract resulting from it on
our behalf.

Signature of Signatory:

As Witnesses:

1..... Name in Block Letters.....

2..... Name in Block Letters.....

Date:

NAME	ADDRESS	SIGNATURE	DATE

Note: *This certificate is to be completed and signed by all of the key partners upon who rests the direction of the affairs of the Partnership as a whole.*

(IV) CERTIFICATE FOR JOINT VENTURE

We, the undersigned, are submitting this Bid offer in Joint Venture and hereby authorize

Mr/Ms....., authorized signatory of the company,
.....acting in the capacity of lead partner, to sign all documents
in connection with the Bid offer for Contract Noand any contract resulting from
it on our behalf.

This authorization is evidenced by the attached power of attorney signed by legally authorized signatories of
all the partners to the Joint Venture.

Signature of Signatory:

As Witnesses:

1..... Name in Block Letters.....

2..... Name in Block Letters.....

Date:

NAME OF FIRM	ADDRESS	AUTHORISING SIGNATURE, NAME AND CAPACITY
Lead partner		

Note: *This certificate is to be completed and signed by all of the key partners upon who rests the direction of the affairs of the Joint Venture as a whole.*

(V) CERTIFICATE FOR SOLE PROPRIETOR

I....., hereby confirm that I am the sole owner of the
business trading as:.....

Signature of Sole owner:

As Witnesses:

1..... Name in Block Letters.....

2..... Name in Block Letters.....

Date:

D: REGISTRATION CERTIFICATES OF AN ENTITY

[Important note to Bidder: Registration Certificates for Companies, Close Corporations and Partnerships and ID documents for Sole Proprietors, must be inserted here. In the case of a Joint Venture, a copy of a duly signed Joint Venture Agreement clearly setting out the roles and responsibilities of the parties must be included with particular reference to the guarantees required in terms of the Contract Data. The Joint Venture Agreement must also clearly indicate how payment is to be affected to the entity and distributed to the parties]

CIDB REGISTRATION:

[Bidder's must also indicate their CIDB registration details in the space provided.]

(If not registered, attach proof that the enterprise can be registered with the CIDB within 10 days)

Registered Name	Registration Number

NHBRC REGISTRATION:

[Bidder's must also indicate their NHBRC registration details in the space provided.]

(Attach proof of registration, or proof that the enterprise is in the process of registration on the NHBRC)

Registered Name	Registration Number

B-BBEE CERTIFICATION:

[The Bidder must also attach hereto a certified copy of their B-BBEE Verification Certificate from a Verification Agency accredited by the South African National Accreditation System (SANAS).]

Verification Agency Issuing Certification	B-BBEE Level

REGISTRATION AS A REGISTERED ASBESTOS CONTRACTOR:

[Bidder's must also indicate their registration details as a registered Asbestos Contractor in the space provided if the Asbestos Works are not Sub-Contracted to a registered Asbestos Contractor.]

(Attach proof of registration)

Registered Name	Registration Number

D1: CSD REGISTRATION: (CENTRAL SUPPLIERS DATABASE)

Bidder's must indicate their CSD registration details in the space provided.

[Attach proof of registration, or proof that the enterprise is in the process of registration on the CSD]

Registered Name	Registration Number

E: DECLARATION OF INTEREST (MBD 4)

[The following particulars must be furnished. In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted.]

- 1 No bid will be accepted from persons in the service of the state*.
- 2 Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorized representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest.

- 3 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

3.1 Full Name:

3.2 Identity Number:

3.3 Position occupied in the Company (director, trustee, Shareholder²)

3.4 Company Registration Number:

3.5 Tax Reference Number:

3.6 VAT Registration Number:

- 3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.

3.8 Are you presently in the service of the state* **YES/NO**
[Delete whichever is not applicable]

3.8.1 If so, furnish particulars

.....
.....

3.9 Have you been in the service of the state for the past twelve months? **YES/NO**
[Delete whichever is not applicable]

3.9.1 If so, furnish particulars

.....
.....

3.10 Do you, have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid?

YES/NO

[Delete whichever is not applicable]

3.10.1 If so, furnish particulars

.....

.....

3.11 Are you, aware of any relationship (family, friend, other) between a bidder and any person in the service of the state who may be involved with the evaluation and or adjudication of this bid?

YES/NO

[Delete whichever is not applicable]

3.11.1 If so, furnish particulars

.....

.....

3.12 Are any of the company's Directors, Managers, Principle Shareholders or Stakeholders in service of the State?

YES/NO

[Delete whichever is not applicable]

3.12.1 If so, furnish particulars

.....

.....

3.13 Are any spouse, child or parent of the company's Directors, Managers, Principle Shareholders or Stakeholders in service of the State?

YES/NO

[Delete whichever is not applicable]

3.13.1 If so, furnish particulars

.....

.....

3.14 Do you or any of the directors, trustees, managers, principles shareholders, or stakeholders of this company have any interest in any other related companies or business or not they are bidding for this contract

YES/NO

[Delete whichever is not applicable]

3.14.1 If so, furnish particulars

.....

.....

Full details of directors / trustees / members / shareholders.

Table E 1: Full Details of Directors / Trustees / Members / Shareholders

Full Name	Identity Number	State Employee Number

CERTIFICATION

I, THE UNDERSIGNED (NAME):.....

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT. I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THE DECLARATION PROVE TO BE FALSE.

.....
SIGNATURE

.....
DATE

.....
POSITION

.....
NAME OF BIDDER

*MSCM Regulations: "in the service of the state" means to be –

- a) A member of –
 - i. Any Municipal Council,
 - ii. Any Provincial Legislature, or
 - iii. The National Assembly or the National Council of Provinces,
- b) A member of the Board of Directors of any municipal entity,
- c) An official of any municipality or municipal entity,
- d) An employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act 1999 (Act No. 1 of 1999),
- e) A member of the accounting authority of any National or Provincial Public Entity, or
- f) An employee of Parliament or a Provincial Legislature.

² Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.

F: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (MBD 6.2)

[Please complete this section and add designated sectors.]

This Bidding Document (MBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2011 (Regulation 9) makes provision for the promotion of local production and content.
- 1.2. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids referred to in paragraph 1.2 above, a two-stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = 1 - [x / y] \times 100$$

Where

- X is the imported content in rand
- Y is the bid price in rand excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as required in paragraph 4.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp) at no cost.

1.6. A bid may be disqualified if –

- a. This Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation, and
- b. The bidder fails to declare that the Local Content Declaration Templates (Annex C, D and E) have been audited and certified as correct.

2. Definitions

- 2.1. "Bid" includes written price quotations, advertised competitive bids or proposals.
- 2.2. "Bid Price" price offered by the bidder, excluding value added tax (VAT).
- 2.3. "Contract" means the agreement that results from the acceptance of a bid by an organ of state.
- 2.4. "Designated Sector" means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content.
- 2.5. "Duly Sign" means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility (close corporation, partnership or individual).
- 2.6. "Imported Content" means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour and intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry.
- 2.7. "Local Content" means that portion of the bid price which is not included in the Imported content, provided that local manufacture does take place.
- 2.8. "Stipulated Minimum Threshold" means that portion of local production and content as determined by the Department of Trade and Industry. and
- 2.9. "Sub-Contract" means the primary contractor's assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.

3. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:

Description of services, works or goods	Stipulated minimum threshold
_____	_____ %
_____	_____ %
_____	_____ %

4. Does any portion of the services, works or goods offered have any imported content? (Tick applicable box)

YES		NO	
-----	--	----	--

- 4.1. If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.reservebank.co.za. Indicate the rate(s) of exchange against the appropriate currency in the table below.
(Refer to Annex A of SATS 1286:2011):

Currency	Rates of Exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

5. Were the Local Content Declaration Templates (Annex C, D and E) audited and certified as correct? (Tick applicable box)

YES		NO	
-----	--	----	--

5.1. If yes, provide the following particulars:

- Full name of auditor:
- Practice number:
- Telephone and cell number:
- Email address:

(Documentary proof regarding the declaration will, when required, be submitted to the satisfaction of the Accounting Officer / Accounting Authority)

6. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the Accounting Officer / Accounting Authority provide directives in this regard.

**LOCAL CONTENT DECLARATION
(REFER TO ANNEX B OF SATS 1286:2011)**

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO.

ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity):

.....

NB

1. The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
2. Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on [http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp). Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below. Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names), do hereby declare, in my capacity as
..... of
..... (name of bidder entity), the following:

- a) The facts contained herein are within my own personal knowledge.
- b) I have satisfied myself that
 - i. The goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
 - ii. The declaration templates have been audited and certified to be correct.
- c) The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C;

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above. The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

- d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

DATE: _____

WITNESS NO.1: _____

DATE: _____

WITNESS NO.2: _____

DATE: _____

(C1) Bid No.
 (C2) Bid Description
 (C3) Designated Product(s)
 (C4) Bid Authority
 (C5) Biding Entity Name
 (C6) Bid Exchange Rate
 (C7) Specified Local Content %

LOCAL CONTENT DECLARATION – SUMMARY SCHEDULE
ANNEX C

Note: VAT to be excluded from all calculations.

Pula EU GBP

Calculation of Local Content								Bid Summary			
Bid Item No.	List of Items	Bid Price – Each (Vat Excl.)	Exempted Imported Value	Bid Value Net of Imported Content	Imported Value	Local Value	Local Content % (Per Item)	Bid Qty	Total Bid Value	Total Exempted Imported Content	Total Imported Content
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)	(C16)	(C17)	(C18)	(C19)
(C20) Total Bid Value									R		
									(C21) Total Exempted Imported Content	R	
									(C22) Total Bid Value Net of Exempt Imported Content	R	
									(C23) Total Imported Content		R
									(C24) Total Local Content		R
									(C25) Average Local Content % of Bid		

Signature of Bidder from Annex B

Date: _____

IMPORTED CONTENT DECLARATION – SUPPORTING SCHEDULE TO ANNEX C
ANNEX D

(D1) Bid No.						
(D2) Bid Description						
(D3) Designated Product(s)						
(D4) Bid Authority						
(D5) Bidding Entity Name						
(D6) Bid Exchange Rate	Pula		EU	R	GBP	R

Note: VAT to be excluded from all calculations.

A. Exempted Imported Content				Calculation of Imported Content						Summary	
Bid Item No.	Description of Imported Content	Local Supplier	Overseas Supplier	Foreign Currency Value as per Commercial Invoice	Bid Exchange Rate	Local Value of Imports	Freight Costs to Port of Entry	All Locally Incurred Landing Costs & Duties	Total Landed Cost Excl. VAT	Bid Qty	Exempted Imported Value
(D7)	(D8)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
(D19) Total Exempted Imported Value										R	

This Total must Correspond with Annex C – C21

A. Imported Directly by the Bidder				Calculation of Imported Content						Summary	
Bid Item No.	Description of Imported Content	Local Supplier	Overseas Supplier	Foreign Currency Value as per Commercial Invoice	Bid Exchange Rate	Local Value of Imports	Freight Costs to Port of Entry	All Locally Incurred Landing Costs & Duties	Total Landed Cost Excl. VAT	Bid Qty	Exempted Imported Value
(D20)	(D21)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)
(D32) Total Exempted Imported Value										R	

B. Imported by a 3 rd Party and Supplied to the Bidder				Calculation of Imported Content						Summary	
Description of Imported Content	Unit of Measure	Local Supplier	Overseas Supplier	Foreign Currency Value as per Commercial Invoice	Bid Rate of Exchange	Local Value of Imports	Freight Costs of Port of Entry	All Locally Incurred Landing Costs & Duties	Total Landed Cost Excl. VAT	Qty Imported	Total Imported Value
(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
(D45) Total Imported Value by 3 rd Party										R	

A. Other Foreign Currency Payments				
Type of Payment	Local Supplier Making the Payment	Overseas Beneficiary	Foreign Currency Value Paid	Bid Rate of Exchange
(D46)	(D47)	(D48)	(D49)	(D50)

Summary of Payment	
Local Value of Payments	
(D51)	
(D52) Total of Foreign Currency Payments Declared by Bidder and/or 3 rd Party	
(D53) Total of Imported Content & Foreign Currency Payments – (D32), (D45) & (D52) above.	

Signature of Bidder from Annex B

Date: _____

G: CERTIFICATE OF INDEPENDENT BID DETERMINATION (MBD 9)

1. This Bidding Document (MBD) must form part of all bids¹ invited.
2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a pe se prohibition meaning that it cannot be justified under any grounds.
3. Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. Take all reasonable steps to prevent such abuse;
 - b. Rejects the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or entity or has committed any improper conduct in relation to such system; and
 - c. Cancels a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
4. This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid rigging.
5. In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

MBD9: CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

CONTRACT NO.: CCT042025: ATHLONE CAMPUS WORKSHOP CLADDING

In response to the invitation for the bid made by:

THE COLLEGE OF CAPE TOWN TVET COLLEGE

Do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: _____ that
(Name of Bidder)

- 1) I have read and I understand the contents of this Certificate.
- 2) I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect.
- 3) I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder.
- 4) Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder.
- 5) For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
 - a. Has been requested to submit a bid in response to this bid invitation;
 - b. Could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - c. Provides the same goods and services as the bidder and/or is in the same line of business as the bidder.
- 6) The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
- 7) In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - a. Prices;
 - b. Geographical area where product or service will be rendered (market allocation);
 - c. Methods, factors or formulas used to calculate prices;
 - d. The intention or decision to submit or not to submit, a bid;
 - e. The submission of a bid which does not meet the specifications and conditions of the bid; or
 - f. Bidding with the intention not to win the bid.

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

- 8) In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.

- 9) The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 10) I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

.....
SIGNATURE

(of person authorised to sign on behalf of the Bidder)

.....
DATE

.....
POSITION

.....

.....
NAME OF BIDDER

H: AFFIDAVIT OF GOOD STANDING THAT WILL BE INCORPORATED INTO THE CONTRACT

The Bidder hereby certifies that neither it nor any of the principals of the enterprise is listed on the register of Bid Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector. The Bidder further certifies that none of its principals have ever been convicted of fraud.

DECLARATION (to be signed in the presence of a Commissioner of Oaths)

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the firm, confirms that the contents of this Affidavit are within my personal knowledge, and save where stated otherwise to the best of my belief both true and correct.

Signature:

Duly authorized to sign on behalf:

Address:.....

.....

.....

Telephone:.....

Signed and sworn to before me at..... on

this the day of by
the Deponent, who has acknowledged that he/she knows and understands the contents of this Affidavit, that its true and correct to the best of his/her knowledge and that he/she has no objection to taking the prescribed oath, and that the prescribed oath will be binding on his/her conscience.

Commissioner of Oaths

.....

Note: This affidavit comprises one (1) page all of which must be initialled by both the Deponent and the Commissioner of Oaths

I: BANKING DETAILS

Bidders financial capacity to finance and undertake a contract of this nature will also be checked and consequently it is a requirement that the details below be provided.

[Attach proof of bank account to this page example of information required bank letter for confirmation of account or letter of good standing from bank, including letter confirming bank rating]

NAME OF BIDDER					
NAME OF ACCOUNT HOLDER AT BANK					
TYPE OF ACCOUNT (Please tick)	CURRENT/CHEQUE		SAVINGS		TRANSMISSION
BANK					
BRANCH NAME					
ACCOUNT NUMBER					
BRANCH CODE					
BANK TELEPHONE NO					
BANK ADDRESS					
NAME OF BANK MANAGER					
TELEPHONE NUMBER					
FAX NUMBER					
NO OF YEARS ABOVE ACCOUNT HAS BEEN WITH BANK					
CREDIT FACILITIES AVAILABLE (State Amount)					

.....
SIGNATURE

(of person authorised to sign on behalf of the Bidder)

.....
DATE

J. DECLARATION OF FINANCIAL CAPACITY

- 1) The following particulars must be furnished in support of the preceding returnable to test financial capacity.
 - No bid will be accepted from persons who cannot prove adequate financial capacity to execute the contract according to the specifications and scope of works and within the timeframes stipulated.
 - In order to prove financial capacity, the Bidder must attach the following:
 - a) A letter from the bank with bank stamp confirming that the Bidder has an active bank account.
 - b) Proof of bank account and letter of good standing from the bank with a credit rating.
 - c) If the contractor is unable to demonstrate sufficient credit facility available, the contractor must at least provide written undertaking/proof of guarantee or financial capacity from a reputable and accredited financial services provider/lender.

CERTIFICATION

I, THE UNDERSIGNED (NAME):.....

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT. I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THE DECLARATION PROVE TO BE FALSE.

.....
SIGNATURE
(of person authorised to sign on behalf of the Bidder)

.....
DATE

.....
POSITION

.....
NAME OF BIDDER

K: SCHEDULE OF THE BIDDER'S EXPERIENCE

Bidders are to provide references for building type recent projects (last five years) of a similar nature with which the company has been involved.

The information provided here will be used to evaluate the Bidder's eligibility to undertake the contract. It is important that the Bidder ensure that sufficient and legible information is provided to enable the Employer to evaluate the criteria noted in the table in F.3.11.2.

[Attach proof of Returnable document to this page example of information required, letters of award and completion certificates, client reference letters. Attached additional copies of this page should it be required.]

PROJECT NAME	
EMPLOYER: Contact Person: Telephone number: E-mail Address:	
CONSULTING ENGINEER: Contact Person: Telephone number: E-mail Address:	
NATURE OF WORK	
VALUE OF WORK (Including VAT)	
DATE COMPLETED	

PROJECT NAME	
EMPLOYER: Contact Person: Telephone number: E-mail Address:	
CONSULTING ENGINEER: Contact Person: Telephone number: E-mail Address:	
NATURE OF WORK	
VALUE OF WORK (Including VAT)	
DATE COMPLETED	

PROJECT NAME	
EMPLOYER: Contact Person: Telephone number: E-mail Address:	
CONSULTING ENGINEER: Contact Person: Telephone number: E-mail Address:	
NATURE OF WORK	
VALUE OF WORK (Including VAT)	
DATE COMPLETED	

PROJECT NAME	
EMPLOYER: Contact Person: Telephone number: E-mail Address:	
CONSULTING ENGINEER: Contact Person: Telephone number: E-mail Address:	
NATURE OF WORK	
VALUE OF WORK (Including VAT)	
DATE COMPLETED	

PROJECT NAME	
EMPLOYER: Contact Person: Telephone number: E-mail Address:	
CONSULTING ENGINEER: Contact Person: Telephone number: E-mail Address:	
NATURE OF WORK	
VALUE OF WORK (Including VAT)	
DATE COMPLETED	

.....
SIGNATURE
 (of person authorised to sign on behalf of the Bidder)

.....
DATE

L: KEY PERSONNEL

In terms of the Project Specification, all unskilled workers are to be locally sourced.

The Bidder shall list below the personnel which he intends to utilize on the Works, including key personnel which may have to be brought in from outside if not available locally.

[Attach proof of Returnable document to this page]

Category of Employee	NUMBER of Persons		
	Key Personnel, Part of the Contractor's Organisation	Key Personnel to be imported if not available locally	Unskilled Personnel to be recruited from local community
Construction Manager			
Site Foreman			
LIC NQF 5 Supervisors			
Artisans and other Skilled Workers			
Unskilled Workers			

[Insert amount/number of people to be employed under the specific criteria]

.....
SIGNATURE

(of person authorised to sign on behalf of the Bidder)

.....
DATE

M: CURRICULUM VITAE OF KEY PERSONNEL (Site Agent / Contract Manager)

The success of this project will largely depend on the ability of the **Site Agent / Contract Manager** to manage local resources that are largely unskilled. The Bidder must indicate who they intend using for this function and must list the incumbent's experience.

Failure to provide proof of a suitable candidate (CV) to manage the work on a permanent basis on site during the currency of the contract will result in dis-qualification in terms of Clause F.2.1.

[Attach proof of Returnable document to this page example of information required CV and Certifications of Qualifications]

Name:	Years with Firm:
Qualifications:	
NQF 5/7 Registration Number:	
Employment Record:	
Experience Record Pertinent to Required Service:	
(Indicate no. of years' experience managing Civil Engineering construction projects of similar nature)	

.....
SIGNATURE
(of person authorised to sign on behalf of the Bidder)

.....
DATE

M1: CURRICULUM VITAE OF KEY PERSONNEL (General Foreman)

The success of this project will largely depend on the ability of the **General Foreman** to manage local resources that are largely unskilled. The Bidder must indicate who they intend using for this function and must list the incumbent's experience.

Failure to provide proof of a suitable candidate (CV) to manage the work on a permanent basis on site during the currency of the contract will result in dis-qualification in terms of Clause F.2.1.

[Attach proof of Returnable document to this page example of information required CV and Certifications of Qualifications

Name:	Years with Firm:
Qualifications:	
NQF 5/7 Registration Number:	
Employment Record:	
Experience Record Pertinent to Required Service:	
(Indicate no. of years' experience managing Civil Engineering construction projects of similar nature)	

.....
SIGNATURE
(of person authorised to sign on behalf of the Bidder)

.....
DATE

M2: CURRICULUM VITAE OF KEY PERSONNEL (SHE Officer)

The safety of this project will largely depend on the ability of the **SHE Officer** to manage Health and Safety resources. The Bidder must indicate who they intend using for this function and must list the incumbent's experience.

Failure to provide proof of a suitable candidate (CV) to manage the work on a permanent basis on site during the currency of the contract will result in dis-qualification in terms of Clause F.2.1.

[Attach proof of Returnable document to this page example of information required CV and Certifications of Qualifications]

Name:	Years with Firm:
Qualifications:	
NQF 5/7 Registration Number:	
Employment Record:	
Experience Record Pertinent to Required Service:	
(Indicate no. of years' experience managing Civil Engineering construction projects of similar nature)	

.....
SIGNATURE
(of person authorised to sign on behalf of the Bidder)

.....
DATE

N: SCHEDULE OF PROPOSED SUB-CONTRACTORS

We notify you that it is our intention to employ the following Sub-Contractors for work on this Bid.				
	Name and Address of Proposed Sub-Contractor	Nature and Extent of Work	CIDB Grading	Previous Experience working with this Sub-Contractor
1				
2				
3				
4				
5				

NOTE: PROOF OF REGISTRATION AS A REGISTERED ASBESTOS CONTRACTOR TO BE ATTACHED TO THIS BID IF THE ASEBSTOS PORTION OF WORKS ON THE PROJECT IS TO BE DONE BY A SUB-CONTRACTOR LISTED ABOVE.

.....
SIGNATURE
(of person authorised to sign on behalf of the Bidder)

.....
DATE

O: PROVISIONAL PROGRAMME

The Bidder shall detail below or attach a preliminary programme reflecting the proposed sequence and tempo of execution of the various activities comprising the work for this Bid.

The programme must indicate all key activities, time frames and must clearly demonstrate the Bidder’s understanding of the scope of works.

The competency and clarity of the programme will help to inform the Employer’s assessment of the Bidder’s eligibility to execute the contract.

[Attach proof of Returnable document to this page example of information required, including the project methodology plan on execution of the works, attached additional copies of this page if required]

PROGRAMME														
ACTIVITY	WEEKS / MONTHS (Delete which is not applicable)													

.....
SIGNATURE
(of person authorised to sign on behalf of the Bidder)

.....
DATE

P: WORKMANS' COMPENSATION REGISTRATION CERTIFICATE (OR PROOF OF PAYMENT OF CONTRIBUTIONS IN TERMS OF THE COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT NO. 130 OF 1993)

[Certified Copy of the Certificate or Proof of Payment thereof obtained from the Workmen's Compensation Commissioner to be inserted here.]

Q: TAX CLEARANCE CERTIFICATE

IMPORTANT NOTES:

- 1) The following is an abstract from the Preferential Procurement Regulations 2001 promulgated with the Preferential Policy Framework Act No 5 of 2000:

"Tax Clearance Certificate

16. No contract may be awarded to a person who has failed to submit an original Tax Clearance Certificate from the South African Revenue Service ("SARS") certifying the taxes of that person to be in order or that suitable arrangement have been made with SARS."

- 2) The ST 5.1 form, Application for Tax Clearance Certificate (in respect of Bids), must be completed by the Bidder in every detail and submitted to the Receiver of Revenue where the Bidder is registered for income tax purposes. The Receiver of Revenue will then furnish the Bidder with a Tax Clearance Certificate that will be valid for 6 months from date of issue. This Tax Clearance Certificate must be submitted in the original with the Bid that is before the closing time and date of the Bid.

Each party to a Consortium/Joint Venture/Sub-contractors must complete a separate Tax Clearance Certificate.

Failure to submit an original and valid Tax Clearance Certificate / Valid Tax Compliance Status Pin, or certified copy thereof, will invalidate the Bid.

TAX CLEARANCE CERTIFICATE

[Tax Clearance Certificate and Valid Tax Compliance Status Pin obtained from SARS to be attached to this page.]

R.: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (MBD8)

- 1) This Standard Bidding Document must form part of all bids invited.
- 2) It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- 3) The bid of any bidder may be disregarded if that bidder, or any of its directors have-
 - a) Abused the institution's supply chain management system,
 - b) Committed fraud or any other improper conduct in relation to such system, or
 - c) Wilfully neglected, reneged on or failed to comply with any government, TVET College or other public sector contract during the past five years,
 - d) Been listed in the Register for BID Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004), or
 - e) Failed to perform on any previous contract.
- 4) **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's database as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the audi alteram partem rule was applied).	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1 If so, furnish particulars:			
4.2	Is the bidder or any of its directors listed on the Register for Bid Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? To access this Register, enter the National Treasury's website, www.treasury.gov.za , click on the icon "Register for Bid Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012) 3265445.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1 If so, furnish particulars:			
4.3	Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1 If so, furnish particulars:			
4.4	Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1 If so, furnish particulars:			

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME):
CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS TRUE AND
CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST
ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
SIGNATURE
(of person authorised to sign on behalf of the Bidder)

.....
DATE

.....
POSITION

.....
NAME OF BIDDER

S: DECLARATION OF SOLVENCY OR LIQUIDITY

- 1) This bidding document must form part of all bids invited.
- 2) It serves as a declaration to be used by TVET College and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of supply chain management system.
- 3) The bid of any bidder may be rejected if that bidder, or any of its directors are:
 - a. Under Liquidation.
 - b. Sequestration.
 - c. Insolvency.
- 4) This Clause is applicable even after the bid is awarded.

.....
SIGNATURE
(of person authorised to sign on behalf of the Bidder)

.....
DATE

.....
POSITION

.....
NAME OF BIDDER

T: CONTRACTOR'S HEALTH AND SAFETY DECLARATION

In terms of the Occupational Health and Safety Act No 85 of 1993 a Contractor may only be appointed to perform key services if the Purchaser is satisfied that the Contractor has the necessary competencies and resources to carry out the work safely in accordance with the provisions of the Act.

To that effect a person duly authorised by the Bidder must complete and sign the declaration hereafter in detail.

Declaration by Bidder

- 1) I the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993) herein after referred to as the "Act".
- 2) I hereby declare that my company has the competence and the necessary resources to safely carry out the services specified under this contract in compliance with the Employer's Health and Safety Specifications.
- 3) I propose to achieve compliance with the Regulations by one of the followings:

(a)	From my own competent resources.	*Yes / No
(b)	From my own resources still to be appointed or trained until competency is achieved.	*Yes / No
(c)	From outside sources by appointment of competent specialist subcontractors.	*Yes / No

[delete whatever is not applicable]

- 4) I confirm that copies of my company's approved Health and Safety Plan, will at all times be available for inspection by the Purchaser's personnel, College of Cape Town TVET College officials and inspectors of the Department of Labour.
- 5) I hereby confirm that adequate provision has been made in my Bided rates and prices in the schedule of quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the Act and that I will be liable for any penalties that may be applied for failure to comply with the provisions of the Act.
- 6) I agree that my failure to complete and execute this declaration to the satisfaction of the Purchaser will mean that I am unable to comply with the requirements of the Act and accept that my Bid will be prejudiced and may as a result be rejected at the discretion of the Purchaser.

.....
SIGNATURE
(of person authorised to sign on behalf of the Bidder)

.....
DATE

U: PROFORMA FORMS TO BE COMPLETED BY SUCCESSFUL BIDDER

U1: PRO FORMA PERFORMANCE GUARANTEE

In terms of clause 14.3 of the JBCC Principal Agreement, Edition 6.2, May 2018 allows for provision of a variable performance guarantee from an approved financial institution which the *Employer* has accepted

1. For this contract only performance bonds provided by a financial institution registered in South Africa will be accepted. NB: Guarantees submitted must be issued by either an insurance company duly registered in terms of the Short-Term Insurance Act, 1998 (Act 53 of 1998) or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990) No alterations or amendments of the wording of the pro-forma will be accepted unless approved prior to it been issued by the Employer.

It is hereby agreed that a Performance Guarantee drafted exactly, or substantially similar, as provided in this returnable will be provided by the Guarantor named below, which is a bank or insurer registered in South Africa:

Name of Guarantor (Bank/insurer):

Address:

The Performance Guarantee shall be provided with the other returnables as set out in the conditional Letter of Acceptance of the successful Bidder's Bid unless otherwise agreed to by the parties.

Signed:

Name:

Capacity:

On behalf of (name of Bidder):

Date:

CONFIRMED BY Guarantor's Authorised Representative

Signature(s):

Name (print):

Capacity:

On behalf of Guarantor (Bank/insurer):

Date:

The Bidder must attach hereto a letter from the guarantor with whom he has made the necessary arrangements, to the effect that the said guarantor will be prepared to provide the required performance guarantee when asked to do so. The acceptable pro forma wording is as per section below:

Pro-Forma JBCC Variable On Demand Performance Guarantee

To: The College of Cape Town TVET College

Dear Sirs

Reference No. [●] [Drafting Note: Guarantor/Bank reference number to be inserted]

Performance Bond: [Drafting Note: Name of Contractor to be inserted]

Employer: Contract Reference - [●] [Drafting Note: Contract reference number to be inserted]

2. In this Guarantee

2.1. The following words and expressions have the following meanings:

- 2.1.1. "Guarantor" - means [●], [●] Branch, (Registration No. [●]); [Drafting Note: Name of Guarantor to be inserted] [□] Financial Services Board Registration number [□]NB: Guarantees submitted must be issued by either an insurance company duly registered in terms of the Short-Term Insurance Act, 1998 (Act 53 of 1998) or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990) No alterations or amendments of the wording of the pro-forma will be accepted unless approved prior to it been issued by the Employer.
 - 2.1.2. "Guarantor's Address" - means [●]; [Drafting Note: Guarantor's physical address to be inserted]
 - 2.1.3. "Contract" - means the written agreement entered into between the Employer and the Contractor on or about [●] [●] 201[●] (Contract Reference No. [●]), as amended, varied, restated, novated or substituted from time to time; [Drafting Note: signature date and Contract reference number to be inserted]
 - 2.1.4. "Contractor" - means [●] a [●] registered in accordance with the laws of [●] with registration number [●]; [Drafting Note: Name and details of Contractor to be inserted]
 - 2.1.5. "Employer" - means The Development Bank of Southern Africa Limited, a juristic person in terms of section 2 of The Development Bank of Southern Africa Limited Act, 13 of 1979;
 - 2.1.6. "Expiry Date" - means the date the of Certificate of Final Completion is issued;
 - 2.1.7. "this Guarantee" - means this document;
 - 2.1.8. "Guaranteed Sum" – means, subject to clause 5, the sum of [● - figure] ([● - words]) the aggregate Guarantee amount, not exceeding 10.0% of the Contract Sum as at the Contract Date, which amount will reduce with 50% when the Practical Completion certificate is issued until Final Completion.
 - 2.1.9. Words or expressions capitalised shall bear the same meaning as assigned to them under the Contract albeit that the Contract itself, and any terms as defined therein, are merely referenced for convenience and not to create an accessory obligation.
3. At the instance of the Contractor, the Guarantor hereby confirms that we hold the Guaranteed Sum at the disposal of the Employer, as security for the proper performance by the Contractor of all of his obligations in terms of and arising from the Contract, and hereby irrevocably and unconditionally both agree and undertake to pay to the Employer, on written demand from the Employer envisaged in paragraph 4 below and received prior to the Expiry Date, any amount or amounts as may be so demanded from time to time, subject to a maximum of the Guaranteed Sum in the aggregate.

4. A demand for payment under this Guarantee shall be made in writing at the Guarantor's address or by email to the following email [.....insert..] and shall:
 - 4.1. state the amount claimed ("the Demand Amount");
 - 4.2. state that the Demand Amount is payable to the Employer in the circumstances contemplated in the Contract;
5. The Guaranteed Sum may be reduced from time to time upon receipt by the Guarantor of the Employer's written certificate certifying the amount of such reduction and the Contractor's entitlement thereto under the Contract.
6. Notwithstanding the reference herein to the Contract the Guarantor acknowledges that:
 - 6.1. the liability of the Guarantor in terms hereof is as principal and not as surety and the Guarantor's obligation/s to make payment:
 - 6.1.1. is and shall be absolute and unconditional in all circumstances; and
 - 6.1.2. is not, and shall not be construed to be, accessory or collateral on any basis whatsoever;
 - 6.2. the Employer shall be entitled to arrange its affairs with the Contractor in any manner which it sees fit, without advising us and without affecting the Guarantor's liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the Contractor or any variation under or to the Contract or termination of the Contract.
 - 6.3. should the Employer cede its rights against the Contractor to a third party where such cession is permitted under the Contract, then the Employer shall be entitled to cede to such third party the rights of the Employer under this Guarantee on written notification to the Guarantor of such cession.
7. The Guarantor's obligations in terms of this Guarantee:
 - 7.1. shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and
 - 7.2. shall not be discharged and compliance with any demand for payment received by the Guarantor in terms hereof shall not be delayed, by the fact that a dispute may exist between the Employer and the Contractor.
8. This Guarantee:
 - 8.1. shall expire on the Expiry Date until which time it is irrevocable;
 - 8.2. is, save as provided for in 6.3 above, personal to the Employer and is neither negotiable nor transferable;
 - 8.3. shall be returned to the Guarantor upon the earlier of payment of the full Guaranteed Sum or expiry hereof;
 - 8.4. shall be regarded as a liquid document for, firstly, the purpose of demonstrating and/or determining the amount due by the Guarantor to the Employer and, secondly, obtaining any court order; and
 - 8.5. shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the Courts of the Republic of South Africa.

9. The Guarantor chooses the domicilium citandi et executandi for all purposes in connection with this Guarantee at the Guarantor's Address.

Signed at..... Date

For and behalf of the Guarantor, which signatories by appending their signatures warrant that they are authorised to bind the Guarantor as above stated:

Guarantor Signatory 1: Guarantor Signatory 2:

Name: Name:

Capacity of Guarantor: Capacity of Guarantor:

Signatory 1:..... Signatory 2:

Witness: Witness:

(Printed Name of Witness): (Printed name of witness):.....

Guarantor's seal or stamp

CONTRACT

This part of the PROCUREMENT DOCUMENT consists of the following four sections:

- **Part C1: Agreement and Contract Data**

This section details the:

- form of offer and acceptance (yellow pages);
- contract data (yellow pages); and
- performance guarantee (white pages).

- **Part C2: Pricing Data**

This section details the:

- pricing instructions (yellow pages); and
- bill of quantities (yellow pages).

- **Part C3: Scope of Work**

This section details the:

- scope of work (Blue).

- **Part C4: Site Information**

This section details the:

- site information (Green).

PART C1: AGREEMENT AND CONTRACT DATA

C1.1 FORM OF OFFER AND ACCEPTANCE

OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of the **CONTRACT NO.: CCT042025: ATHLONE CAMPUS WORKSHOP CLADDING**

The Bidder, identified in the offer signature block below, has examined the documents listed in the Bid data and addenda thereto as listed in the Bid schedules, and by submitting this offer has accepted the conditions of Bid.

By the representative of the Bidder, deemed to be duly authorized, signing this part of this form of offer and acceptance, the Bidder offers to perform all of the obligations and liabilities of the Contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS

.....
..... Rand (In words); R (in figures)

This offer may be accepted by the Employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the Bidder before the end of the period of validity stated in the Bid data, whereupon the Bidder becomes the party named as the contractor in the conditions of contract identified in the contract data.

For the Bidder:

.....

Signature

.....

Name

.....

Capacity

Name and Address of Organization:

.....

.....

.....

Signature and Name of Witness:

.....

Signature

.....

Name

.....

Date

ACCEPTANCE

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Bidder's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Bidder's Offer shall form an agreement between the Employer and the Bidder upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the Contract are contained in

Part C1 Agreements and Contract Data, (which include this Agreement)
Part C2 Pricing Data
Part C3 Scope of Work
Part C4 Site Information

and drawings and documents or parts thereof, which may be incorporated by reference into the above listed parts.

Deviations from and amendments to the documents listed in the Bid Data and any addenda thereto as listed in the Bid Schedules as well as any changes to the terms of the Offer agreed by the Bidder and the Employer during this process of Offer and Acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorized representative(s) of both parties.

The Bidder shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data at, or just after, the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the Bidder receives one fully completed original copy of this Document, including the Schedule of Deviations (if any). Unless the Bidder (now Contractor) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

For the Employer:

.....
Signature
.....
Name
.....
Capacity

Name and Address of Organization:

.....
.....
.....

Signature and Name of Witness:

.....
Signature
.....
Name
.....
Date

CONFIRMATION OF RECEIPT

The Bidder, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today:

The..... (day) of..... (month), 20 (year), at(place)

For the Contractor:

.....
Signature

.....
Name

.....
Capacity

Signature and Name of Witness:

.....
Signature

.....
Name

C1.2 CONTRACT DATA

C1.2.1 CONDITIONS OF CONTRACT

JOINT BUILDING CONTRACTS COMMITTEE (JBCC) CONDITIONS OF CONTRACT

The joint building contracts committee (JBCC) Minor Works Agreement: Edition 5.2, of May 2018 conditions of contract as published by the JBCC is applicable to this contract. Copies of these conditions of contract may be obtained from the stockists listed on the JBCC website (<https://jbcc.co.za/documents/stockists/>).

The contract data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the joint building contracts committee (JBCC) Minor Works Agreement: Edition 5.2, of May 2018.

Each item of data given below is cross-referenced to the clause in the joint building contracts committee (JBCC) Minor Works Agreement: Edition 5.2, of May 2018 for construction works to which it mainly applies.

VARIATIONS TO THE JOINT BUILDING CONTRACTS COMMITTEE MINOR WORKS AGREEMENT: EDITION 5.2: MAY 2018

A PROJECT INFORMATION

A 1.0 Works [1.1]

Project Name	The College of Cape Town: Athlone Campus Workshop Cladding
Reference Number	[CCT042025]
Works Description	Wall Cladding System Installation
	The following wall cladding system applies to:
	<ul style="list-style-type: none"> • Skills Workshop; • CBMT Workshops (Levels 1, 2&3 and 4); • Auto Electrical workshop; • Storage areas 1 and 2.
	Removal of existing asbestos cement wall panelling system where it will be replaced with an IBR profiled metal cladding system Removal of asbestos cement material in strict accordance with asbestos abatement regulations.
	Supplier produced IBR profiled roof sheeting with a coating mass of no less than AZ150 and to a total coated thickness of 0.53mm. Said profile to be coated with a modified polyester paint system to match the colour of the newly renovated workshops on campus. Sheeting to be fixed to steel sheeting rails at 2400mm centres using 12x25mm (every second crest) self-tapping fasteners with ERDM seals with a Class 4 coating mass. The IBR profile shall be roll-formed 1 with 5 trapezoidal ribs at 171 mm centres, with an effective cover width of 686 mm. The rib height shall be 36.5 mm and shall be fixed in accordance with the manufacturer's recommendations.
	Ancillary Works.
	Roofing System Installation
	The following roofing system applies to:
	<ul style="list-style-type: none"> • Storage areas 1 and 2
	Install new treated structural timber wood battens (appropriately sized in strict accordance with SANS 10400-L:2011) onto existing and new roof trusses.
	Supplier produced, IBR profiled roof sheeting with a coating mass of no less than AZ 150 and a total coated thickness of 0.53mm. Said profile to be coated with a modified polyester paint system as manufactured by the approved supplier, in a colour finish to match existing or as per client preference. Sheeting to be fixed using FIXTITE (or similar approved) fasteners to intermediate timber purlins at 2100mm centres, and to ridge

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	and eave spans at 1800mm centres, with a 12 x 85mm wafer head Timberfix or suitable Manufacturer approved wafer hex self-drilling fastener with a Class 4 coating mass at every second crest, at immediate purlins and at every crest at eave purlins, all in accordance with the manufacturer's recommendations
	Ancillary Works.
	Roof Drainage System Installation
	The following roof drainage system applies to: <ul style="list-style-type: none"> • Skills Workshop; • CBMT Workshops (Levels 1, 2&3 and 4); • Auto Electrical workshop AND Storage areas 1 and 2.
	Install new gutter and downpipe systems as indicated in the schedule of quantities, complete as specified and in accordance with supplier specification and SANS10400-R requirements.
	Ancillary Works.

A 2.0 Site [1.1]

Erf / Stand Number	32621
Township / Suburb	Athlone
Site Address	Athlone Campus, CNR Protea and Eland, Athlone, Cape Town
Local Authority	City of Cape Town

A 3.0 Employer [1.1]

Name	The College of Cape Town TVET College		
Legal Entity of above	College of Cape town	Contact Person	Sibongile Kula-Sibenke
Business Registration No.	Organ of state	Telephone No.	0214046700
VAT/GST No.	None	Mobile No.	
Country	South Africa	Email	Skula-sibenke@cct.edu.za
Postal Address	PO Box 726, Cape Town, Republic of South Africa		
		Postal Code	8000
Physical Address	334 Albert Road, Salt River, Cape Town, South Africa		
		Postal Code	7925

A 4.0 Principal Agent [1.1: 5.1]

Name	AFI Consult (Pty) Ltd		
Legal Entity of above	Company	Contact Person	Mr. O.M. Bergh
Practice No.	2000/025109/07	Telephone No.	012 346 1848
		Mobile No.	082 894 1684
Country	South Africa	Email	oloff@aficonsult.co.za
Postal Address	PO Box 25905, Monument Park		
		Postal Code	0105

Physical Address	2394 Una Drive, Betty's Bay, Western Cape		
		Postal Code	7141

A 5.0 Agent [1.1: 5.2]

Name	Safe Working Practice Cape Town (Pty) Ltd		
Legal Entity of above	Company	Contact Person	Mr. M. Winter
Practice No.	2014/021347/07	Telephone No.	021 701 0470
		Mobile No.	071 603 2213
Country	South Africa	Email	markw@safepractice.co.za
Postal Address	11 Bergvliet Road, Bergvliet		
		Postal Code	7945
Physical Address	11 Bergvliet Road, Bergvliet		
		Postal Code	7945

A 6.0 Agent [1.1: 5.2]	Discipline		
Name			
Legal Engity of above		Contact Person	
Practice No.		Telephone No.	
		Mobile No.	
Country		Email	
Postal Address			
		Postal Code	
Physical Address			
		Postal Code	

B CONTRACT INFORMATION

B 1.0 Definitions [1.1]

Bills of Quantities: System/Method of measurement	Re-measurement (Bill of Quantities)
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B 2.0 Law, Regulations and Notices [2.0]

Law applicable to the works , state country [2.1]	South Africa
--	--------------

B 3.0 Offer and Acceptance [3.0]

Currency applicable to this Agreement [3.2]	ZAR
--	-----

B 4.0 Documents [4.0]

The original signed Agreement is to be held by the Principal Agent [4.2], if not, indicate by whom	---
Number of copies of Construction Information issued to the Contractor at no cost [4.5]	One

Documents comprising the Agreement	Page No
The JBCC® Minor Works Agreement, Edition 5.2 May 2018	1 to 19
The JBCC® Minor Works Agreement – Contract Data, Edition 5.2 May 2018	1 to 11
The JBCC® General Preliminaries for use with the JBCC ® Minor Works Agreement, Edition 5.2 May 2018	1 to 7

Contract Drawings – Description	Number	Revision	Date
Layout Plan	2021/18/02-L01	A	10/2022

Employer's Agent [5.0]

Authority is delegated to the following Agents to issue Contract Instructions and perform duties for specific aspects of the works [5.2]
AFI Consult (Pty) Ltd
Company Registration No. 2000/025109/07

Principal's Agent and Agents' interest or involvement in the works other than a professional interest [5.3]

B 6.0 Insurances [8.0]

Insurances by Employer	Amount (Incl Tax)	Deductible Amount (Incl Tax)
Contract Works Insurance:		
New Works [8.2.1] (Contract Sum or Amount)		
OR		
Works with alterations and additions [8.2.1] (reinstatement value of existing structures with or including new works)		
Direct Contractors [13.0] where applicable, to be included in the contract works insurance		
Free Issue [10.1.12] where applicable, to be included in the contract works insurance		
Escalation, professional fees and reinstatement costs if not included above		
Total of the above contract works insurance amount		
Supplementary insurance [8.2.2]		
Public liability insurance [8.2.3]		
Removal of lateral support insurance [8.2.4]		
Other insurances [8.2.5]		
Yes/No?		If Yes, Description 1
Yes/No?		If Yes, Description 2

Obligations of the Employer [10.1]

Existing premises will be in use and occupied [10.1.3]	Yes/No?	YES
If Yes, Description	Tuition in progress at existing campus. Classrooms in use daily.	
Restriction of working hours [10.1.3]	Yes/No?	YES
If Yes, Description	Before 06:00am, After 18:00pm and weekends on request	
Natural features and known services to be preserved by the Contractor [10.1.4]	Yes/No?	YES
If Yes, Description	All existing building features, gardens and services to be preserved	
Restrictions to the site or areas that the Contractor may not occupy [10.1.5]	Yes/No?	NO
If Yes, Description	---	
Supply of free issue [10.1.12]	Yes/No?	NO
If Yes, Description	---	

B 8.0 Direct Contractors [13.0]

Extent of work [10.1.13]	---
Extent of work [10.1.13]	---
Extent of work [10.1.13]	---
Extent of work [10.1.13]	---
Extent of work [10.1.13]	---

B 9.0 Possession of Site [10.1.6] Practical Completion [15.0; 17.0] and Penalties [18.0]

	Intended date of possession of the site [10.1.6]	Period for inspection by the Principal Agent [15.3]	Date for practical completion [15.1.1]	Penalty [18.1]
	Date	Working Days	Date	Penalty amount per calendar day (Excl TAX)
Practical Completion for the works as a whole	TBC	40(8Weeks)	TBC	Lesser of R2500 or 1/20 of 1% of the offered total of prices excluding VAT per calendar day & R1,000.00 per working day for the Employer's Agent

Criteria to achieve Practical Completion not covered in the definition of Practical Completion
- Roof Sheeting installed as per the requirements of the SANS10400-L specification and relevant material supplier requirements.
- All Asbestos Cement materials forming part of the scope of works removed from campus and safely disposed of according to the requirements of the Asbestos Abatement Regulations of 2020.
- Wall cladding system installed complete as per relevant SANS and supplier specifications
- Roof drainage system installed complete as per relevant SANS and supplier specifications.

B 10.0 Payment [19.0]

Date of month for issue of regular payment certificates [19.2]	25th
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B 11.0 Dispute Resolution [22.0]

Adjudication [22.5.1] Name of nominating body	
Applicable rules for adjudication [22.5.2]	

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Arbitration [22.6.4] Name of Nominating body	
Applicable rules for arbitration [22.6.5]	

B 12.0 JBCC® General Preliminaries - Selections

Checking Documents [P2.1]	As per General Preliminaries.		
Provisional Bills of Quantities [P2.2]	Yes/No?	YES	
Availability of construction information [P2.3]	Yes/No?	NO	
Previous work – dimensional accuracy – details [P3.1]	As per General Preliminaries.		
Previous work – defects – details [P3.2]	As per General Preliminaries.		
Inspection of adjoining properties – details [P3.3]	As per General Preliminaries.		
Handover of site in stages – specific requirements [P4.1]	As per General Preliminaries.		
Enclosure of the works – specific requirements [P4.2]	As per General Preliminaries.		
Existing premises occupied – details [P4.5]	ADD, fully functional learning institution with students on campus.		
Services known – specific requirements [P4.6]	YES, All existing building features, gardens and services to be preserved		
Water [P8.1]	By Contractor	Yes/No?	no
	By Employer	Yes/No?	yes
	By Employer – metered	Yes/No?	no
Electricity [P8.2]	By Contractor	Yes/No?	no
	By Employer	Yes/No?	yes
	By Employer – metered	Yes/No?	no
Ablution and welfare facilities [P8.1]	By Contractor	Yes/No?	yes
	By Employer	Yes/No?	no
Communication facilities – specific requirements [P8.4]	As per General Preliminaries.		
Protection of the works – specific requirements [P11.1]	YES, All components not forming part of the scope of works to be protected.		
Protection/isolation of existing works and works occupied in sections – specific requirements [P11.2]	As per General Preliminaries.		
Disturbance – specific requirements [P11.5]	YES, Tuition facility, due care to be taken for minimum disruption of tuition activities.		
Environmental disturbance – specific requirements [P11.6]	As per General Preliminaries.		

C BID CLOSING

Bid Closing Date	04 NOVEMBER 2025	Time	11h00
Bid submission Address	334 Albert Road, Salt River, Cape Town, South Africa, 7925 The College of Cape Town TVET College – Central Office		
Bid may be submitted by Email	NO		

D BIDDER'S SELECTIONS

D 1.0 Securities [9.0]

Guarantee for Construction: Select Option A or B

☐

Option A	Guarantee for Construction (variable) by Contractor [9.1.1]
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Option B	Payment Reduction [9.1.2]
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Guarantee for payment by Employer [9.2]	Amount	
--	--------	--

Advance payment, subject to a guarantee for advance payment [9.4]	Amount	
--	--------	--

D 2.0 Contractor's annual holiday periods during the construction period

Year 1 Contractor's annual holiday period	Start Date		End Date	
Year 2 Contractor's annual holiday period	Start Date		End Date	
Year 3 Contractor's annual holiday period	Start Date		End Date	

D 3.0 Payment of Preliminaries [19.0]

Contractor's Selection

Select Option A or B

☐

Where the **Contractor** does not select an option, Option A shall apply.

Option A	The preliminaries shall be paid in accordance with an amount prorated to the value of the works executed in the same ratio as the amount of the preliminaries to the contract sum , which contract sum shall exclude the amount of preliminaries . Contingency sum(s) and any provision for cost fluctuations shall be excluded for the calculation of the aforesaid ratio.
----------	--

Option B	The preliminaries shall be paid in accordance with an amount agreed by the Principal Agent and the Contractor in terms of the priced document to identify an initial establishment charge, a time-related charge and a final dis-establishment charge. Payment of the time-related charge shall be assessed by the Principal Agent and adjusted from time to time as may be necessary to take into account the rate of progress of the works .
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**D 4.0 Adjustment of Preliminaries [20.6.3]
Contractor's Selection**

Select Option A or B

☐

Where the **Contractor** does not select an option, Option A shall apply.

Provision of Particulars

The **Contractor** shall provide the particulars for the purpose of the adjustment of **preliminaries** in terms of his selection. Where completion in **sections** is required, the **contractor** shall provide an apportionment of **preliminaries** per **section**.

Option A	<p>At allocation of the preliminaries amounts into Fixed, Value-related and Time-related amounts as defined for adjustment method Option A below, within fifteen (15) working days of the date of acceptance of the Bid.</p>
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Option B	<p>A detailed breakdown of the preliminaries amounts within fifteen (15) working days of possession of the site. Such breakdown shall include, inter alia, the administrative and supervisory staff, the use of construction equipment, establishment and si-establishment charges, insurances and guarantees, all in terms of the programme.</p>
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Adjustment Methods

The amount of **preliminaries** shall be adjusted to take account of the effect which changes in time and/or value have on **preliminaries**. Such adjustment shall be based on the particulars provided by the **contractor** for this purpose in terms of Options A or B, shall preclude any further adjustment of the amount of **preliminaries** and shall apply notwithstanding the actual employment of resources by the contractor in the execution of the works.

Option A	<p>The preliminaries shall be adjusted in accordance with the allocation of preliminaries amounts provided by the contractor, apportioned to sections where completion in sections is required.</p> <p>Fixed – An amount which shall not be varied</p> <p>Value-related – An amount varied in proportion to the contract value as compared to the contract sum. Both the contract sum and the contract value shall exclude the amount of preliminaries, contingency sum(s) and any provision for cost fluctuations.</p> <p>Time-related – An amount in proportion to the number of calendar days extension to the date of practical completion to which the contractor is entitled with an adjustment of the contract value [23.1; 23.3] as compared to the number of calendar days in the initial construction period [26.9.4].</p>
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Option B	<p>The adjustment of preliminaries shall be based on the number of calendar days extension to the date of practical completion to which the contractor is entitled with an adjustment of the contract value [23.2; 23.3] as compared to the number of calendar days in the initial construction period [26.9.4].</p>
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	The adjustment shall take into account the resources as set out in the detailed breakdown of the preliminaries for the period of construction during which the delay occurred.
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Failure to provide particulars within the period stated

Option A	<p>Where the allocation of preliminaries amounts for Option A is not provided, the following allocation of preliminaries amounts shall apply:</p> <p>Fixed – Ten percent (10%) Value-related – Fifteen percent (15%) Time-related – Seventy-five percent (75%)</p> <p>Where the apportionment of the preliminaries per section is not provided, the categorised amounts shall be prorated to the cost of each section within the contract sum as determined by the principal agent.</p>
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Option B	Where the detailed breakdown of preliminaries amounts for Option B is not provided, Option A shall apply.
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Lump Sum Contract

Where the amount of preliminaries is not provided it shall be taken as 7.5% (seven and a half percent) of the contract sum, excluding contingency sum(s) and any provision for cost fluctuations.

E FORM OF BID

E 1.0 Bidder's Details

Name			
Legal Entity of above		Contact Person	
Business Registration No.		Telephone No.	
VAT/GST No.		Mobile No.	
Country		Email	
Postal Address			
		Postal Code	
Physical Address			
		Postal Code	

E 2.0 Acceptance of Bid Conditions

By submission of this Bid to the Employer the Bidder offers and agrees to execute and complete the works and to remedy any defects in conformity with the specification for the Bid amount stated.

The Bid shall remain in full legal force for forty-five (45) calendar days from the closing date of the Bid. The Bidder accepts liability for loss or damages that may be suffered by the Employer should the Bidder validity period not be honoured.

The lowest or any Bid will not necessarily be accepted by the Employer, nor will reasons be given for such a decision.

Offer and Acceptance of this Bid shall be as per the information and signatories captured on PART C1: AGREEMENT AND CONTRACT DATA, C1.1 Form of Offer and Acceptance.

E 3.0 Bid Amount Compilation

Offer and Acceptance of this Bid shall be as per the information and signatories captured on PART C1: AGREEMENT AND CONTRACT DATA, C1.1 Form of Offer and Acceptance.

E 4.0 Bid Qualifications

C1.3 AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH & SAFETY ACT No. 85 OF 1993

THIS AGREEMENT is made between
(herein after called the Employer) of the one part, herein represented by:.....
.....
in his capacity as:

AND:

.....
(hereinafter called the Contractor) of the other part, herein represented by
.....
.....
in his capacity as:

.....
duly authorized to sign on behalf of the Contractor.

WHEREAS the Contractor is the Mandatory of the Employer in consequence of an agreement between the Contractor and the Employer in respect of

CONTRACT NO: CCT042025
COLLEGE OF CAPE TOWN: ATHLONE CAMPUS WORKSHOP CLADDING

For the construction, completion and maintenance of the works;

AND WHEREAS the Employer and the Contractor have agreed to enter into an agreement in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act No 85 of 1993, as amended by OHSA Amendment Act No 181/1993 (hereinafter referred to as the Act);

NOW THEREFORE the parties agree as follows:

1. The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the regulations promulgated in terms thereof.
2. The Contractor undertakes to fully comply with all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations: Provided that should the Employer have prescribed certain arrangements and procedures that same shall be observed and adhered to by the Contractor, his officials and employees. The Contractor shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.
3. The Contractor hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the Act and Regulations, and the Contractor expressly absolves the Employer and the Employer's Consulting Engineers from being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures in respect of the work included in the contract.
4. The Contractor agrees that any duly authorized officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the Contractor has complied with his undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the Contractor, or to take such steps it may deem necessary to remedy the default of the Contractor at the cost of the Contractor.

5. The Contractor shall be obliged to report forthwith to the Employer any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

Thus signed at for and on behalf of the CONTRACTOR
on this the day of 20.....

SIGNATURE:

.....

NAME AND SURNAME:

.....

CAPACITY:

.....

WITNESSES: 1.....
2.....

Thus signed at For and on behalf of the EMPLOYER on this
on this the day of 20.....

SIGNATURE:

.....

NAME AND SURNAME:

.....

CAPACITY:

.....

WITNESSES: 1.....
2.....

PART C2: PRICING DATA

C.2.1 PRICING INSTRUCTIONS

1. General

The bill of quantities forms part of the contract documents and must be read and priced in conjunction with all the other documents comprising the contract documents, which include the conditions of Bid, conditions of contract, the specifications (including the Project Specification) and the drawings.

2. Description of Items in the Schedule

The bill of quantities has been drawn up generally in accordance with the Particular Specifications and related standardized specifications.

The short descriptions of the items in the bill of quantities are for identification purposes only and the measurement and payment clause of the standardized and particular specifications, read together with the relevant clauses of the project specification and directives on the drawings, set out what ancillary or associated work and activities are included in the rates for the operations specified.

3. Quantities Reflected in the Schedule

The quantities given in the bill of quantities are estimates only, and subject to re-measuring during the execution of the work. The Contractor shall obtain the Engineer's detailed instructions for all work before ordering any materials or executing work or making arrangements for it.

The works as finally completed in accordance with the contract shall be measured and paid for as specified in the bill of quantities and in accordance with the general and special conditions of contract, the specifications and project specifications and the drawings. Unless otherwise stated, items are measured not in accordance with the drawings, and no allowance has been made for waste.

The validity of the contract will in no way be affected by differences between the quantities in the bill of quantities and the quantities finally certified for payment.

4. Pricing of the Bill of Quantities

The prices and rates to be inserted by the Bidder in the bill of quantities shall be the full inclusive prices to be paid by the Employer for the work described under the several items, and shall include full compensation for all costs and expenses that may be required in and for the completion and maintenance during the defects liability period of all the work described and as shown on the drawings as well as all overheads, profits, incidentals and the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Bid is based.

Each item shall be priced and extended to the "Total" column by the Bidder, with the exception of the items for which only rates are required, or items which already have prime cost or provisional sums affixed thereto. If the Contractor omits to price any items in the bill of quantities, then these items will be considered to have a nil rate or price.

All items for which terminology such as "inclusive" or "not applicable" have been added by the Bidder will be regarded as having a nil rate which shall be valid irrespective of any change in quantities during the execution of the contract.

The Bidder shall fill in rates for all items where the words "rate only" appears in the "Total" column. "Rate Only" items have been included where:

- a) An alternative item or material is contemplated,
- b) Variations of specified components in the make-up of a pay item may be expected, and
- c) No work under the item is foreseen at Bid stage but the possibility that such work may be required is not excluded.

For "Rate Only" items no quantities are given in the "Quantity" column, but the quoted rate shall apply in the event of work under this item being required. The Bidder shall however note that in terms of the Bid data the Bidder may be asked to reconsider any such rates which the Employer may regard as unbalanced.

All rates and amounts quoted in the bill of quantities shall be in rand and cents and shall include all levies and taxes (other than VAT) VAT will be added in the summary of the bill of quantities.

5. Correction of Entries

Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the Bidder.

6. Arithmetical Errors

Arithmetical errors found in the bill of quantities as a result of faulty multiplication of addition, will be corrected by the Engineer at the Bid evaluation stage, in accordance with the procedure set out in the Bid data.

7. Monthly Payments

The contractor shall cooperate and assist the principal agent in the preparation of payment valuations by providing all required documents and quantified amounts of work duly executed. Where the contractor has not provided such information, the principal agent shall make a fair estimate of the work executed. The principal agent shall regularly by the due date (CD) issue payment certificated to the contractor with a copy to the employer until and including the issue of the final payment certificate. A payment certificate may be for a nil or negative amount.

8. Units of Measurement

The units of measurement described in the bill of quantities are metric units for which the standard international abbreviations are used. Non-standard abbreviations which may appear in the bill of quantities are as follows:

No.	= Number	PC sum	= Prime cost sum
%	= Present	PSum	= Provisional sum
PS/m	= Provisional sum per month	PS/Day	= Cost Sum per working day
LSum	= Lump Sum		

9. Product Names or Similar Approved

Wherever reference has been made to product names, it also includes all similar TVET College approved product names. Should alternative products be included, all relevant information to be supplied for approval by the TVET College.

C2.2 BILL OF QUANTITIES

SECTION	DESCRIPTION	PAGE
SECTION 1:	GENERAL ITEMS	76
SECTION 2:	WORKSHOPS	77 - 80
SUMMARY OF	SCHEDULES	81

SECTION 1 - GENERAL ITEMS							
ITEM NO	PAYMENT REFERENCE	LI	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1.1			PRELIMINARIES AND GENERAL				
1.1.1			Site Establishment	Sum	1		
1.1.2			Security	Weeks	8		
1.1.3			Ablution Facilities	Sum	1		
1.1.4			Water and Electricity	Sum	1		
1.1.5			Access	Sum	1		
1.1.6			Supervision	Weeks	8		
1.1.7			Rubble Removal / Cleaning of Site / Protection	Sum	1		
1.1.8			SHE Requirements	Sum	1		
1.1.9			SHE Audits	No.	2		
1.2	PA 5.2.1		AIA FEES				
1.2.1			Risk Assessment and Asbestos Plan by approved AIA including submission to the Department of Labour.	Sum	1		
1.2.2			Setup and Monitoring	Sum	1		
1.2.3			Weekly Monitoring	Weeks	4		
1.2.4			Clearance Monitoring	Sum	1		
Plus							
2.5			Clearance Report and Certificate	Sum	1		
2.6			Air Samples	No.	2		
TOTAL FORWARDED TO SUMMARY							

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SECTION 2 - WORKSHOPS							
ITEM NO	PAYMENT REFERENCE	LI	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2.1	PA 5.2.1		ASBESTOS CEMENT REMOVAL				
2.1.1			Dismantling/demolition of the asbestos cement wall panels as required to install cladding support structure including the Safe Disposal of the asbestos cement wall panels (safe disposal certificate to be provided from a licensed landfill site specifically designated for asbestos disposal). Due care to be taken not to damage existing insulation and internal face asbestos cement panels.	m²	560		
2.2	PA 5.2.2		CLADDING AND SHEETING				
2.2.1			Supply and install complete wall cladding system.				
			The rate shall cover the cost of supplying, delivering, storing on-site, handling, moving, installing and fixing the sheeting (finished or pre-painted as scheduled or shown on the drawings). Complete with all necessary fasteners, and shall also cover the cost of cutting, notching and waste, and of all scaffolding, temporary supports, hoisting facilities and safety precautions.				
2.2.1.1			Supplier produced IBR profiled roof sheeting with a coating mass of no less than AZ150 and to a total coated thickness of 0.53mm. Said profile to be coated with a modified polyester paint system to match the colour of the newly renovated workshops on campus. Sheeting to be fixed to steel sheeting rails at 2400mm centres using 12x25mm (every second crest) self tapping fasteners with ERDM seals with a Class 4 coating mass. The IBR profile shall be roll formed with 5 trapezoidal ribs at 171 mm centers, with an effective cover width of 686 mm. The rib height shall be 36.5 mm and shall be fixed in accordance with the manufacturer's recommendations.	m²	560		
2.2.1.2			Install drip flashings at doors, windows and top edges.	m	158		
2.2.1.3			Install closure angle flashings 100mm x 100mm at building corners and doors.	m	71		
2.2.1.4			Consumables.	No	1		
2.2.1.5			Remove all building rubble from site on completion.	No	1		
SUB-TOTAL CARRIED FORWARD TO NEXT PAGE							

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SECTION 2 - WORKSHOPS							
ITEM NO	PAYMENT REFERENCE	LI	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SUB-TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE							
2.2.2			Supply and install complete roof sheeting system. The rate shall cover the cost of supplying, delivering, storing on-site, handling, moving, installing and fixing the sheeting (finished or pre-painted as scheduled or shown on the drawings). Complete with all necessary fasteners, and shall also cover the cost of cutting, notching and waste, and of all scafolding, temporary supports, hoisting facilities and safety precautions.				
2.2.2.1			Supplier produced, IBR profiled roof sheeting with a coating mass of no less than AZ 150 and a total coated thickness of 0.53mm. Said profile to be coated with a modified polyester paint system as manufactured by the approved supplier, in a colour finish to match existing or as per client preference. Sheetting to be fixed using FIXTITE (or similar approved) fasteners to intermediate timber purlins at 2100mm centres, and to ridge and eave spans at 1800mm centres, with a 12 x 85mm wafer head Timberfix or suitable Manufacturer approved wafer hex self-drilling fastener with a Class 4 coating mass at every second crest, at immediate purlins and at every crest at eave purlins, all in accordance with the manufacturer's recommendations. The Sheetting shall be IBR as manufactured by an approved supplier. The profile shall be roll-formed with 5 trapezoidal ribs at 171 mm centers, with an effective cover width of 686 mm. The rib height shall be 36.5 mm and shall be fixed in accordance with the manufacturer's recommendations				
2.2.2.2			a) Fixed to Timber Purlins Ancillaries The rate shall cover the cost of supplying, delivering, storing on-site, handling, moving, installing and fixing all ancillaries (finished or pre-painted as scheduled or shown on the drawings). Complete with all necessary fasteners, and shall also cover the cost of cutting, notching and waste, and of all scaf-folding, temporary supports, hoisting facilities and safety precautions.	m²	205		
SUB-TOTAL CARRIED FORWARD TO NEXT PAGE							

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SECTION 2 - WORKSHOPS							
ITEM NO	PAYMENT REFERENCE	LI	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SUB-TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE							
2.4			a) Headwall Flashings, Barge Flashings and Closures.	m	90		
			SITE CLEARANCE				
2.4.1	PA 5.2.3		Demolish and remove structures/ buildings and dismantle steelwork, etc.				
			a) Existing corrugated roof sheeting and waste materials.	m ²	205		
2.5	PA 5.2.4		STRUCTURAL STEELWORK				
			Supply and Fabrication				
2.5.1			Industrial Box Gutter Systems				
			a) Aluminium Box gutters (custom size and seamless construction). Rate to cover complete installation.	m	55		
			b) Header Box	No	4		
			c) End Caps	No	4		
			d) Stripping out old gutters	m	60		
			e) Downpipes (160mm uPVC Class 6)	m	20		
			f) Bends	No	4		
2.5.2			Gutter Systems				
			a) Aluminium gutters 150mm wide seamless construction. Rate to cover complete installation.	m	80		
			b) Outlets	No	8		
			c) End Caps	No	8		
			d) Stripping out old gutters (PVC)	m	35		
			e) Downpipes (100mm PVC)	m	25		
			f) Bends	No	15		
2.5.3	PA 5.2.1		Remove Existing ASBESTOS gutters and downpipes from skills workshop.	m	50		
2.5.4			Sand and repaint existing Fascia boards	m ²	50		
2.5.5			Replace damaged fascia boards with new Fibre Cement Fascia Board (10mm x 225mm).	m	0		
2.6	PA 5.2.6		Timber Purlins				
2.6.1			The rate shall include the complete supply, delivery and installation of purlins in strict accordance with the requirements of SANS10400-L. Special consideration should be given to the corrosion protection of fasteners and materials in coastal areas.				
			a) Minimum of 70mm x 133m SA Pine (at a maximum spacing of 750mm c/c).	m	175		
SUB-TOTAL CARRIED FORWARD TO NEXT PAGE							

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SECTION 2 - WORKSHOPS							
ITEM NO	PAYMENT REFERENCE	LI	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SUB-TOTAL BROUGHT FORWARD FROM PREVIOUS PAGE							
2.7			BUILDING WORK				
2.7.1	PA 5.2.7		Roof Insulation:				
			a) Polyester ceiling insulation (Isotherm or similar approved).	m ²	205		
			b) Reflective foil insulation (sisalation FR405 light industrial grade or similar approved)	m ²	105		
2.7.2	PA 5.2.8		DOORS				
2.7.2.1			Roller Shutter Doors				
			a) Remove existing roller shutter doors.	No	1		
			b) Fit and install new roller shutter doors complete with new posts.	No	1		
2.7.2.2			Wooden Doors				
			Remove existing double doors from skills workshop store and replace with new painted timber doors (French doors 1200mm x 2032mm) with new 3-lever lock and handle set (SABS approved).	No	1		
2.8			PROVISIONAL SUMS SPECIFIED BY THE PROJECT MANAGER				
2.8.1			Provisional allowance for unspecified work that may be required by the Client or Project Manager and only be quantified during the construction phase.	P Sum	1	R250 000.00	R 250 000.00
TOTAL FORWARDED TO SUMMARY							

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

SUMMARY OF SCHEDULES		
SECTION	DESCRIPTION	AMOUNT
SECTION 1	GENERAL ITEMS	
SECTION 2	WORKSHOPS	
SUB-TOTAL A		
Plus 20% for Contingencies on Sub-Total A (Compulsory)		
Plus 0% for Escalation on Sub-Total A (Compulsory)		
SUB-TOTAL		
PLUS 15% VAT (Compulsory)		
TOTAL TENDER PRICE		

TENDERER: _____

COMPANY: _____

ADDRESS: _____

CELL: _____

EMAIL: _____

SIGNATURE: _____

DATE: _____

Contractor

Witness 1

Witness 2

Client

Witness 1

Witness 2

PART C.3: SCOPE OF WORK

C3.1: DESCRIPTION OF THE WORKS

C3.1.1 Employer's objectives

The Employers objectives with this project is to replace roofing systems at two of their buildings situated on the Athlone Campus of the College of Cape Town TVET College. Furthermore, the objective is to replace damaged corrugated metal sheeting as well as the safe removal and disposal of asbestos cement containing roof sheeting materials.

C3.1.2 Overview of the Works

SKILLS WORKSHOP

- Prepare existing **outside wall** surfaces for the installation of IBR cladding system by removal of required asbestos cement wall cladding in strict accordance with the asbestos abatement regulations.
- Remove existing asbestos cement gutters and downpipes entirely and in strict accordance with the approved asbestos removal plan and regulations.
- Install new roof drainage system, 150mm industrial type with similar material and coating specification as the wall cladding sheeting. Installed in strict accordance with supplier specification.
- Install new outside wall cladding system. Supplier produced IBR profiled roof sheeting with a coating mass of no less than AZ150 and to a total coated thickness of 0.53mm. Said profile to be coated with a modified polyester paint system to match the colour of the newly renovated workshops on campus. Sheetting to be fixed to steel sheeting rails at 2400mm centres using 12x25mm (every second crest) self-tapping fasteners with ERDM seals with a Class 4 coating mass. The IBR profile shall be roll-formed with 5 trapezoidal ribs at 171 mm centres, with an effective cover width of 686 mm. The rib height shall be 36.5 mm and shall be fixed in accordance with the manufacturer's recommendations.
- Install all necessary cladding appurtenances such as flashings, corner flashings, window, and door trimmings to similar coating specification as wall cladding etc.
- Remove existing double doors from skills workshop store and replace with new painted timber doors (French doors 1200mm x 2032mm) with new 3-lever lock and handle set (SABS approved)

CBMT WORKSHOPS (ALL LEVELS)

- Prepare existing outside wall surfaces for the installation of IBR cladding system by removal of required asbestos cement wall cladding in strict accordance with the asbestos abatement regulations
- Remove existing asbestos cement downpipes and header boxes entirely and in strict accordance with the approved asbestos removal plan and regulations.
- Install new roof drainage system, custom size aluminium seamless gutters with similar coating specification as the wall cladding sheeting. Installed in strict accordance with supplier specification.
- Install new outside wall cladding system. Supplier produced IBR profiled roof sheeting with a coating mass of no less than AZ150 and to a total coated thickness of 0.53mm. Said profile to be coated with a modified polyester paint system to match the colour of the newly renovated workshops on campus. Sheetting to be fixed to steel sheeting rails at 2400mm centres using 12x25mm (every second crest) self-tapping fasteners with ERDM seals with a Class 4 coating mass. The IBR profile shall be roll-formed with 5 trapezoidal ribs at 171 mm centres, with an effective cover width of 686 mm. The rib height shall be 36.5 mm and shall be fixed in accordance with the manufacturer's recommendations.
- Install all necessary cladding appurtenances such as flashings, corner flashings, window, and door trimmings to similar coating specification as wall cladding etc.
- Install new steel roller door (2.68m x 2.79m) at CBMT Workshop (Level 4).

AUTO ELECTRICAL WORKSHOP

- Prepare existing outside wall surfaces for the installation of IBR cladding system by removal of required asbestos cement wall cladding in strict accordance with the asbestos abatement regulations
- Remove existing uPVC gutters and downpipes entirely
- Install new roof drainage system, 150mm industrial type with similar material and coating specification as

the wall cladding sheeting. Installed in strict accordance with supplier specification.

- Install new outside wall cladding system. Supplier produced IBR profiled roof sheeting with a coating mass of no less than AZ150 and to a total coated thickness of 0.53mm. Said profile to be coated with a modified polyester paint system to match the colour of the newly renovated workshops on campus. Sheeting to be fixed to steel sheeting rails at 2400mm centres using 12x25mm (every second crest) self-tapping fasteners with ERDM seals with a Class 4 coating mass. The IBR profile shall be roll-formed with 5 trapezoidal ribs at 171 mm centres, with an effective cover width of 686 mm. The rib height shall be 36.5 mm and shall be fixed in accordance with the manufacturer's recommendations.
- Install all necessary cladding appurtenances such as flashings, corner flashings, window, and door trimmings to similar coating specification as wall cladding etc.

STORAGE AREAS (1 & 2)

- Remove existing corrugated roof sheeting and existing roof sheeting support battens.
- Install new treated structural timber wood battens (appropriately sized in strict accordance with SANS 10400-L:2011) onto existing and new roof trusses.
- Install new roof sheeting, Supplier produced, IBR profiled roof sheeting with a coating mass of no less than AZ 150 and a total coated thickness of 0.53mm. Said profile to be coated with a modified polyester paint system as manufactured by the approved supplier, in a colour finish to match existing or as per client preference. Sheeting to be fixed using FIXTITE (or similar approved) fasteners to intermediate timber purlins at 2100mm centres, and to ridge and eave spans at 1800mm centres, with a 12 x 85mm wafer head Timberfix or suitable Manufacturer approved wafer hex self-drilling fastener with a Class 4 coating mass at every second crest, at immediate purlins and at every crest at eave purlins, all in accordance with the manufacturer's recommendations. The Sheeting shall be IBR as manufactured by an approved supplier. The profile shall be roll-formed with 5 trapezoidal ribs at 171 mm centers, with an effective cover width of 686 mm. The rib height shall be 36.5 mm and shall be fixed in accordance with the manufacturer's recommendations."
- Sand and repaint existing fascia boards and barge boards.
- Install new roof drainage system, 125mm residential type with similar material and coating specification as the roof sheeting. Installed in strict accordance with supplier specification.
- Prepare existing outside wall surfaces for the installation of IBR cladding system.
- Install new outside wall cladding system. Supplier produced IBR profiled roof sheeting with a coating mass of no less than AZ150 and to a total coated thickness of 0.53mm. Said profile to be coated with a modified polyester paint system to match the colour of the newly renovated workshops on campus. Sheeting to be fixed to steel sheeting rails at 2400mm centres using 12x25mm (every second crest) self-tapping fasteners with ERDM seals with a Class 4 coating mass. The IBR profile shall be roll-formed with 5 trapezoidal ribs at 171 mm centres, with an effective cover width of 686 mm. The rib height shall be 36.5 mm and shall be fixed in accordance with the manufacturer's recommendations.
- Install all necessary cladding appurtenances such as flashings, corner flashings, window, and door trimmings to similar coating specification as wall cladding etc.

C3.1.3 Location of the Works

The CoCT, Athlone Campus is situated on Erven 32621 at CNR Protea and Eland, Athlone, Cape Town, within the municipal jurisdiction of the City of Cape Town at coordinates:

- 33°57'34.16"S,
- 18°30'35.24"E

C3.1.4 Temporary Works

The following shall form part of the temporary works under this contract, however, shall not be limited to such and might be expanded or changed by the Engineer should circumstances on site valid such decisions:

- Clear site and surround to create an accessible working area as required,
- Provide temporary fencing around the Contractor's campsite and the Engineer's site office,
- Provide site and administrative personnel, including security staff etc. as required or instructed,
- Monitor and report levels as construction progresses; managed all site staff, CLO and local labourers, plant, equipment and materials etc.,

- Managed all required quality control procedures as specified and as instructed by the Engineer,
- Providing temporary scaffolding, mechanical equipment and obtaining other specialized services (as may be required) for the erection of steel structure and elements,
- Provide all personnel, equipment, clothing, accessories etc. in order to adhere to the OHS Act and EPWP requirements,
- Attend official site meetings chaired by the Engineer, and managed meetings on site with all personnel and CLO to ensure compliance with the OHS Act and progress on site is according to the construction programme, and
- Ensure project requirements and specifications are met as per the EPWP guidelines and other Employer initiatives to be implemented.

C3.2: SPECIFICATIONS

C3.2.1: STANDARD SPECIFICATIONS

The standard specifications on which this contract is based are the SABS/SANS 10400 Standardized Specifications.

Although not bound in nor issued with this document, the following parts of the SANS 10400 standardized specifications shall apply:

SANS 10400 A :	Part A: General Principles and Requirements
SANS 10400 B :	Part B: Structural Design
SANS 10400 C :	Part C: Dimensions
SANS 10400 D :	Part D: Public Safety
SANS 10400 F :	Part F: Site Operations
SANS 10400 K :	Part K: Walls
SANS 10400 L :	Part L: Roofs
SANS 10400 O :	Part O: Lighting and Ventilation
SANS 10400 R :	Part R: Stormwater Disposal
SANS 10400 T :	Part T: Fire Protection

The following SANS specifications are also referred to in this document and the Contractor is advised to obtain them from Standards South Africa (a division of SABS) in Cape Town.

SANS 10396:2003: Implementing Preferential Construction Procurement Policies using Targeted Procurement Procedures

SANS 1914-1 to 6 (2002): Targeted Construction Procurement

SANS 1921-1 (2004): Construction and Management Requirements for Works Contracts
Part 1: General Engineering and Construction Works and where accommodation of traffic is involved.

SANS 1921-2 (2004): Construction and Management Requirements for Works Contracts
Part 2: Accommodation of Traffic on Public Roads Occupied by the Contractor.

C3.2.2: PARTICULAR SPECIFICATIONS

INTRODUCTION

Particular specifications are included in IN PART C3.2.2 and are prefixed "P" and numbered alphabetically.

PA : THE APPLICATION OF THE NATIONAL BUILDING REGULATIONS: PART L - ROOFS

PA: THE APPLICATION OF THE NATIONAL BUILDING REGULATIONS: PART L - ROOFS

FOREWORD

The particular specification should be used in conjunction with the necessary construction drawings as well as the required supplier and industry accepted specifications for roofing installation. Credit is given to the SANS 10400-L:2011 that forms the basis of this particular specification.

PA 1. . SCOPE

This specification supplements the requirements of SANS 10400 is deemed-to-satisfy requirements for compliance with part L (Roofs) of the National Building Regulations.

PA 2. . NORMATIVE REFERENCES

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Information on currently valid national and international standards can be obtained from the SABS Standards Division.

- ASTM E 1646, Standard test method for water penetration of exterior metal roof panel systems by uniform static air pressure difference.
- SANS 457-2, Wooden poles, droppers, guardrail posts and spacer blocks – Part 2: Softwood species.
- SANS 457-3 (SABS 457-3), Wooden poles, droppers, guardrail posts and spacer blocks – Part 3: Hardwood species.
- SANS 542, Concrete roofing tiles.
- SANS 1288, Preservative-treated timber.
- SANS 1460, Laminated timber (glulam).
- SANS 1707-1, Sawn eucalyptus timber – Part 1: Proof-graded structural timber.
- SANS 1707-2, Sawn eucalyptus timber – Part 2: Brandering and battens.
- SANS 1783-2, Sawn softwood timber – Part 2: Stress-graded structural timber and timber for frame wall construction.
- SANS 1783-4, Sawn softwood timber – Part 4: Brandering and battens.
- SANS 2001-CT2, Construction works – Part CT2: Structural timberwork (roofing).
- SANS 10005, The preservative treatment of timber.
- SANS 10177-2, Fire testing of materials, components and elements used in buildings – Part 2: Fire resistance test for building elements.
- SANS 10177-5, Fire testing of materials, components and elements used in buildings – Part 5: Non combustibility at 750 °C of building materials.
- SANS 10400-A:2010, The application of the National Building Regulations – Part A: General principles and requirements.
- SANS 10400-B (SABS 0400-B), The application of the National Building Regulations – Part B: Structural design.
- SANS 10400-C, The application of the National Building Regulations – Part C: Dimensions.
- SANS 10400-K, The application of the National Building Regulations – Part K: Walls.
- SANS 10400-R (SABS 0400-R), The application of the National Building Regulations – Part R: Stormwater disposal.
- SANS 10400-T, The application of the National Building Regulations – Part T: Fire protection.
- SANS 10400-V, The application of the National Building Regulations – Part V: Space heating.
- SANS 10407, Thatched roof construction.

PA 3. . DEFINITIONS

For the purposes of this document, the definitions given in SANS 10400-A (some of which are repeated for convenience) and the following apply.

PA 3.1. Accredited Testing Laboratory

Laboratory that has been accredited by the South African National Accreditation System (SANAS)

PA 3.2. Adequate

Adequate

in the opinion of any local authority, or
in relation to any document issued by the council, in the opinion of the council

PA 3.3. Agrément Certificate

Certificate that confirms fitness-for-purpose of a non-standardized product, material or component or the acceptability of the related non-standardized design and the conditions pertaining thereto (or both) issued by the Board of Agrément South Africa

PA 3.4. Batten

Small section timber member, fixed parallel to the line of the eaves, at right angles to the rafters, and onto which tiles, or slates are fixed

PA 3.5. Bearing

Structural support, usually a wall, positioned under the top chord or bottom chord or between the end points of a roof truss, beam or rafter

PA 3.6. Board of Agrément South Africa

Body that operates under the delegation of authority of the Minister of Public Works

PA 3.7. Brandering

Small section timber member which is usually fixed to the underside of a truss chord to support a fixed ceiling

PA 3.8. Category 1 Building

Building which

- a) is designated as being of class A3, A4, F2, G1, H2, H3, or H4 occupancy (see Regulation A20 in SANS 10400-A),
- b) has no basements,
- c) has a maximum length of 6,0 m between intersecting walls or members providing lateral support, and
- d) has a floor area that does not exceed 80 m².

NOTE 1 Table C.1 of SANS 10400-A:2010 outlines the difference in performance between category 1 buildings and other buildings that have the same occupancy designation in respect of a number of building attributes.

NOTE 2 A building may be classified as a category 1 building for the purposes of one or more parts of SANS 10400. Additional limitations may accordingly be imposed on category 1 buildings. For example, a category 1 building in terms of SANS 10400-T (Fire protection) will be restricted to a single storey.

NOTE 3 Fire requirements for category 1 buildings are based on occupants escaping quickly from buildings.

The design population for occupancies as set out in table 2 of part A of the Regulations (see SANS 10400-A) should therefore not be exceeded.

PA 3.9. Chord

Main member that forms the outline of a truss.

PA 3.10. Clear Span

Horizontal distance between the opposite faces of supporting walls (see figure 1).

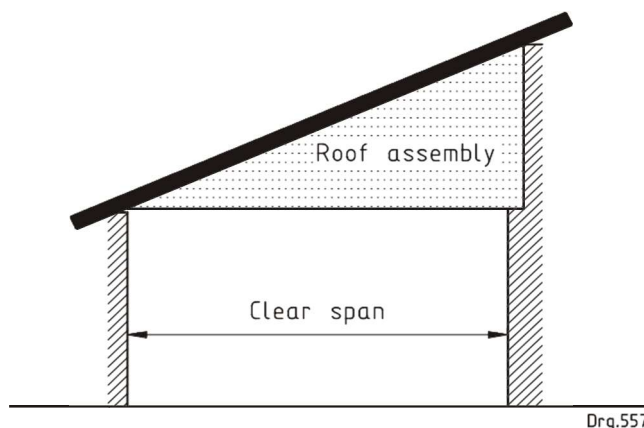


Figure 1: Definition of Clear Span

PA 3.11. Combustible

Opposite of non-combustible.

PA 3.12. Competent Person

Person who is qualified by virtue of his education, training, experience and contextual knowledge to make a determination regarding the performance of a building or part thereof in relation to a functional regulation or to undertake such duties as may be assigned to him in terms of the National Building Regulations.

NOTE This is a generic definition, to be used where no other definition is given, or no references are made to other standards. Other parts of SANS 10400 contain definitions of a more specific nature relevant to their disciplines.

PA 3.13. Competent Person (Built Environment)

Person who

is registered in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000), as either a Professional Engineer or a Professional Engineering Technologist, or
is registered in terms of the Architectural Profession Act, 2000 (Act No. 44 of 2000), as a Professional Architect or a Professional Senior Architectural Technologist, and
is generally recognized as having the necessary experience and training to undertake rational assessments or rational designs in the field of roofs and roofing

PA 3.14. Deemed to Satisfy Requirement

Non-mandatory requirement, the compliance with which ensures compliance with a functional regulation.

PA 3.15. Drip

Noun, step, or groove formed at the underside of a roof slab overhang parallel to the edge of the slab.

PA 3.16. Fall

Slope of a roof.

PA 3.17. Fire Resistance

Shortest period for which a building element or building component complies with the requirements for stability, integrity and insulation when tested in accordance with SANS 10177-2.

PA 3.18. Flat Roof

Roof with a slight fall which is designed and constructed to allow rainwater to be shed by gutters, outlets or to the perimeter of the roof.

PA 3.19. Functional Regulation

Regulation that sets out in qualitative terms what is required of a building or building element or building component in respect of a particular characteristic, without specifying the method of construction, dimensions, or materials to be used.

PA 3.20. Heel Joint

Position on a truss at which the top chords and bottom chords intersect, or where the first vertical web intersects with the bottom chord in stub-ended trusses.

PA 3.21. Nail Plate

Steel plate punched to form a nail pattern integral with the plate, and which is used as a structural connector.

PA 3.22. Non-combustible

Classified as non-combustible when tested in accordance with SANS 10177-5.

PA 3.23. Pitch

Angle of inclination of rafters to the horizontal, or angle of inclination of the surface on which tiles or sheeting is laid.

PA 3.24. Purlin

Horizontal member attached to, and placed perpendicular to, the rafter in order to support roof sheeting materials.

PA 3.25. Purlin Beam

Beam that is parallel to the eaves and that serves the purpose of a rafter.

PA 3.26. Rafter

Top chord horizontal or inclined member that establishes the upper edge of a truss or general roof line.

PA 3.27. Rafter Beam

Sloping roof member of engineered or rational design size that supports the roof covering material with or without the use of purlins or battens.

PA 3.28. Rational Assessment

Assessment by a competent person of the adequacy of the performance of a solution in relation to requirements including as necessary, a process of reasoning, calculation, and consideration of accepted analytical principles, based on a combination of deductions from available information, research and data, appropriate testing and service experience.

PA 3.29. Rational Design

Design by a competent person involving a process of reasoning and calculation and which may include a design based on the use of a standard or other suitable document.

PA 3.30. Roof Assembly

Building cover and its supporting structure, including any ceiling attached to such structure and any additional components such as insulation.

PA 3.31. Softwood Timber

Timber derived from trees of the genus *Pinus* grown in Southern Africa and which has been appropriately graded with respect to its intended use.

PA 3.32. Suitable

Capable of fulfilling or having fulfilled the intended function, or fit for its intended purpose.

PA 3.33. Tie Beam

Bottom chord, horizontal or inclined member that establishes the lower edge of a truss.

PA 3.34. Truss

Triangulated combination of members and joints which, when fitted together, form a rigid structural component capable of withstanding loads.

PA 3.35. Underlay

Flexible membrane fitted between the roof support structure and the battens.

PA 3.36. Web

Member that joins the top chords and bottom chords to form triangular patterns that give truss action.

PA 4. . Requirements

PA 4.1. General

The functional regulations pertaining to roofs contained in part L of the National Building Regulations shall be deemed to be satisfied where;

- a) roof coverings and waterproofing systems are in accordance with the requirements of PA 4.2,
- b) flat roofs, in addition to complying with the general requirements of PA 4.2, are
 1. in accordance with the requirements of PA 4.3, or
 2. the subject of a rational design or rational assessment prepared by a competent person (built environment) and are inspected by such a person during installation,
- c) the roof assembly and any ceiling assembly, in addition to complying with the requirements of SANS 10400-C, are in accordance with the requirements of either
 1. PA 4.4, provided that the roof assembly is supported on walls that comply with the requirements of SANS 10400-K, or

2. SANS 10400-B, subject to any nail-plated connectors having engineering properties for application with softwood determined by an accredited testing laboratory, and corrosion resistance at least equivalent to that provided by a galvanizing coating of 275 g/m²,
- d) gutters and downpipes, where provided, are sized in accordance with the requirements of SANS 10400-R, and
- e) the fire resistance and combustibility of the roof assembly or any ceiling assembly are in accordance with the requirements of SANS 10400-T or PA 4.5.

NOTE 1 SANS 10243 provides guidance on the manufacture, erection and bracing of timber roof trusses.

NOTE 2 Walls supporting roof trusses which do not have a bottom chord in a straight line between the supports, for example scissor or A-frame trusses, should be designed to withstand the horizontal thrusts that develop. Such walls should be designed in accordance with the requirements of SANS 10400-B.

PA 4.2. Roof Coverings and Waterproofing Systems

PA 4.2.1. General Requirements

PA 4.2.1.1.Any roof covering and waterproofing system, or part thereof, shall

- a) Resist the penetration of rain to the extent that
 1. in buildings other than category 1 buildings, any water which might penetrate the roof is of insufficient intensity to run down the inside surface of the roof, or drip onto the ceiling or floor, and
 2. in the case of category 1 buildings, water which penetrates the roof is of insufficient intensity to run down the internal face of walls onto the floor or form a damp patch on the ceiling or floor;
- b) be capable of being effectively repaired in the event of being damaged, despite aging of the materials; and
- c) resist, with an appropriate degree of reliability over its design working life when being suitably maintained,
 1. temperatures from -10 °C to +80 °C and rapid reversals of temperature of the order of 60 °C, without deterioration,
 2. the effects of UV radiation without the deterioration of its essential properties,
 3. the effects of condensation at the undersurface,
 4. chemical attack from common atmospheric gases and saline atmospheres in marine environments,

NOTE 1 Aluminium zinc or galvanized or similarly coated roof sheets should be made of steel with a minimum thickness of 0,5 mm.

NOTE 2 The steel should be coated with a minimum coating thickness of

- a) AZ 150 or Z275 for coastal areas (within a strip of 5 km along the coastline), and for areas subjected to aggressive environments (e.g. exposed to industrial pollutants), and
- b) AZ 100 or Z200 for all other areas.

NOTE 3 In addition, the material specified in note 2 should be coated with an appropriate paint coating (e.g. bituminous aluminium paint, factory pre-painted and baked coating, modified polyester or a suitable acrylic paint).

NOTE 4 All sheeting products with the AZ 100 or Z200 coating, as specified in note 2(b), should be clearly marked as "NOT SUITABLE FOR COASTAL AND AGGRESSIVE ENVIRONMENTS".

5. the growth of bacteria, lichens, fungi, etc.,
6. puncturing and penetration when the roof is in use, and
7. any reversible and irreversible movement emanating from the roof structure.

PA 4.2.1.2.Products used in roof coverings and waterproofing systems shall preserve their properties satisfactorily with normal maintenance specified by the manufacturer for at least the following periods:

- a) in systems which can be readily repaired or replaced: 10 years; and
- b) in systems that are difficult to replace: 20 years.

PA 4.2.1.3.....Accumulated hail on roofs after moderate hail storms shall not cause water to penetrate the interior of the building.

PA 4.2.1.4.....The requirements of PA 4.2.1.1 to PA 4.2.1.3 may be complied with where the roof covering or waterproofing system is

- a) in accordance with the requirements of PA 4.2.2,
- b) the subject of an Agrément certificate and such roof covering or waterproofing system is use within the scope, conditions and limitations prescribed in the certificate and is compatible with other elements or components of the roofing system, or
- c) installed by a specialist and is provided with a five-year written guarantee for watertightness.

NOTE SANS 10021 provides some guidance on the waterproofing of roofs.

PA 4.2.2. Roof Coverings in Pitched Roofs

PA 4.2.2.1.....Roofs shall be provided with a pitch of not less than that given in tables 1 and 2, provided that sheeted roofs without hips and valleys in category 1 buildings may have a roof slope of 5° subject to all end laps in such sheeting being sealed and having a minimum lap of 250 mm. The slope of valleys in such roofs shall not be less than 11°.

PA 4.2.2.2.....Tiles, when laid at a pitch of 30° and tested for 2h in a rain-penetration testing rig as described in SANS 542 and where a relative humidity of at least 70 % is maintained under the tiles while the test is in progress, shall not permit the formation of water drops on the underside of the roof construction in respect of buildings other than category 1 buildings, and the flow of water down the inside of the tiles in respect of category 1 buildings. Flow in the test rig shall be induced by a sparge pipe placed over the top of the roof frame to simulate rain that runs down from higher courses of a full-size roof and a suitable spray to simulate direct rainfall. The flow rates for the sparge and spray shall be 150 mm/h and 75 mm/h, respectively.

PA 4.2.2.3.....Sheeted roofs, when tested in accordance with ASTM E 1646, shall exhibit no leakage in respect of buildings other than category 1 buildings, and shall not cause water to drip onto the ceiling or floor from the underside in respect of category 1 buildings.

PA 4.2.2.4.....Suitable tiled and sheeted roof coverings shall be installed either in accordance with the manufacturer's instructions or with the skill and care normally used by workers working with similar materials.

PA 4.2.2.5.....Thatching shall comply with the materials requirements of, and be installed in accordance with the requirements of, SANS 10407. The thickness of the thatch upon installation shall be in accordance with table 3.

PA 4.2.2.6.....Undertile membranes shall be laid loose so that water can drain between rafters and shall be installed strictly in accordance with the manufacturer's instructions where tiles, slates and shingles are laid

- a) in roofs that have a pitch of less than 26°, or
- b) in roofs that have a pitch of 45° or steeper, and
- c) in those areas between the coastline and an imaginary line 30 km inland, parallel with the coastline, or the top of the escarpment or watershed of the first mountain range inland, if these are less than 30 km from the coastline.

NOTE The entire area of jurisdiction of any local authority, the area of which is cut by the line demarcating these coastal areas, is taken as falling within the coastal area.

REQUEST FOR QUOTATION - BID DOCUMENT

Table 1: Minimum roof slopes of sheeted roofs

1	2	3	4
Roof covering	Minimum angle of slope Degrees	Minimum end lap mm	
		End laps sealed	End laps not sealed
Corrugated (including box rib) profile (galvanized iron, polycarbonate and fibre glass)	11	150	250
	15	150	225
	17	150	200
	22	150	150
Corrugated fibre-cement sheets	11	200	300
	15	175	275
	17	150	250
	22	150	200
	26	150	150
Specialized long span sheets (metal and fibre cement)	3 to 5, depending upon manufacturer's design and specification	As specified by the manufacturer	

NOTE: The manufacturer's instructions should be followed.

Table 2: Minimum roof slopes of non-sheeted roofs

1	2	3
Roof covering		Minimum angle of slope Degrees
Type	Description	
Tiles, slates and shingles	Fibre-cement slates:	
	a) with an approved underlay	11
	b) without an approved underlay	17
	Concrete and clay tiles and shingles:	
	a) with an approved underlay	17
	b) without an approved underlay	26
	Metal tiles:	
	a) with an approved underlay	11
	b) without an approved underlay	15
	Natural slate on open battens:	
	a) with an approved underlay	20
	b) without an approved underlay	30
Thatch	Thatch	45 in general but 35 at dormer windows

NOTE 1 When metal roof tiles are used over an existing roof, the existing roof slope may be retained.

NOTE 2 An undertile membrane, when properly laid, will provide a highly effective impermeable barrier against the ingress of wind-driven rain and dust. Underlays should therefore be provided on all tiled and slated roofs, irrespective of the slope and also if ceilings are not installed, so as to minimize the effect of wind-blown dust entering through the tiles.

NOTE 3 Under strong gusts of wind, the suction force on the roof tiles might exceed the mass of the tiles, requiring the tiles to be securely fixed in order to prevent them from being lifted from the roof. An undertile membrane can substantially lower these pressures and so reduce the risk of wind uplift.

NOTE 4 Increasing the slope at the dormer windows to 40° reduces the maintenance requirements in this area.

NOTE 5 The manufacturer's instructions should be followed.

NOTE 6 Refer to SANS 10062 for fixing specifications.

Table 3: Minimum thickness of thatch layer

1	2	3
Type	Stem/butt diameter mm	Layer thickness mm
Fine thatching grass or reed	1,2 to 2,5	175
Coarse thatching grass or reed	2,5 to 4	200
Water reed	1 to 7	300

PA 4.2.3. Roof Lights

Roof lights shall

- have a maximum opening area of 0,6 m² or, if in the form of a translucent roof sheet, an installed width of 700 mm,
- resist ultraviolet radiation degradation for a period of at least 15 years,
- resist hail impacts of 10 J in accordance with the requirements of SANS 10400-B, and
- be designed and installed in a manner that does not allow rainwater to penetrate the roof.

PA 4.3. Drainage and Waterproofing of Flat Roofs

PA 4.3.1. General

PA 4.3.1.1.Flat roofs shall have a fall towards external gutters, outlets or roof edges of not less than 1:80 where there is no interruption in the flow of water, and 1:50 where there is an interruption in the flow. Where two directional falls intersect, the minimum finished fall of 1:80 shall be maintained along the mitre. (See figure 2.)

NOTE 1 Flat roofs should be constructed with a fall of 1:80, including cross falls. To ensure that a finished fall of 1:80 is achieved, it might be necessary to provide a limiting design slope of 1:50 in concrete slabs to allow for construction inaccuracies and for deflection under dead loads and imposed loads.

NOTE 2 The required slope can be achieved on a concrete roof by casting or finishing concrete to the required fall, by applying sand-cement screeds to the concrete to achieve the required levels, or by a combination thereof. When laying a screed in the rainy season, especially in winter rainfall areas, consideration should be given to adding a suitable polymer modifier to the screed mix.

NOTE 3 The falls and cross falls to timber flat roofs should be created in the rafter design.

PA 4.3.1.2.Construction drawings shall clearly designate ridges and valleys and state relative falls as shown in figure 2.

PA 4.3.1.3.Penetrations through roofs shall, as far as possible, be avoided and be located away from low points. Such penetrations shall not be flexible and shall be kept at least 200 mm away from all vertical surfaces, e.g. upstand beams and walls.

PA 4.3.1.4.Plumbing pipes, electrical conduits, air conditioning pipes, etc. shall not be in clusters.

PA 4.3.1.5.Precast panels and precast roof structures shall be designed in such a manner that any subsequent movement of the concrete elements will not impair the performance of the waterproofing system.

PA 4.3.1.6.A suitable step shall be formed between internal and external areas to prevent the ingress of water to the interior of the building.

NOTE The height of the step should take account of the requirements for falls to outlets or gutters, finishes and waterproofing systems.

PA 4.3.2. Gutters and Downpipes

PA 4.3.2.1. Gutters, if provided, and unless designed by a competent person (built environment), shall be located only along the perimeter of the building. They shall be so designed that stormwater does not penetrate the interior of the building if they become blocked.

PA 4.3.2.2. Outlets shall be set flush with the concrete or recessed into the timber decking to prevent ponding around the outlets.

PA 4.3.2.3. The position of all outlets shall be at least 500 mm away from upstands, parapet walls and 1 000 mm away from expansion joints.

PA 4.3.2.4. The installation requirements of the supplier of rainwater goods, such as rainwater outlets, gutters and downpipes, shall be adhered to.

PA 4.3.3. Flat Concrete Roofs

NOTE The requirements of PA 4.3.3 do not cover the structural design or the thermal performance of concrete roofs. Concrete roof designs should take into account the thermal properties of the concrete, which may be determined by the thickness and density of the concrete and its built-up waterproofing layer. If a thermally insulating layer is desired, it should be incorporated above the concrete structural deck and attention should be given to the provision of ventilation to allow moist air, which might accumulate below the waterproofing layer, to be vented to the outside air.

PA 4.3.3.1. Unless the expansion joints are designed by a competent person (built environment) to accommodate the flow of water over such joints, twin kerb upstand-type joints (see figure 3) shall be installed over expansion joints in concrete roofs, which shall be located away from outlets.

PA 4.3.3.2. Upstand beams of height not less than 170 mm shall be provided in concrete roofs at all intersections between the masonry walling and the roof surface. Corner fillets that have horizontal and vertical dimensions of not less than 75 mm shall be provided at such intersections. (See figure 4.)

PA 4.3.3.3. Drips shall be provided beneath all concrete roof overhangs. (See figure 5.)

PA 4.3.3.4. All concrete or screeded surfaces to be waterproofed shall be sound, smooth and even in a wood-floated finish to the correct falls and cross falls, and without undulations or any protrusions or contaminants.

NOTE Concrete and screeded surfaces should not be highly polished, e.g. power floated.

PA 4.3.4. Waterproofing Systems

PA 4.3.4.1. A waterproofing system shall be installed on top of a flat roof by a competent person strictly in accordance with the manufacturer's instructions such that the roof remains watertight for a period of at least five years without any maintenance other than the cleaning of gutters, downpipes and surfaces. Such competent person shall satisfy himself that the materials selected are appropriate for the application, taking into account the degree of exposure of the waterproofing, the protection to the material provided, and the area in which the building is located.

NOTE 1 Delamination of the waterproofing system from dense substrates, such as concrete, can occur due to the inability of the substrates to dissipate retained moisture vapour. A less dense sand-cement screed permits the dissipation of any retained moisture vapour and, as a result, delamination is avoided.

NOTE 2 A 20 mm thick sand-cement screed should be laid on top of all lightweight screeds to receive waterproofing as such screeds can be too porous and friable for good adhesion of some waterproofing systems.

NOTE 3 All concrete and screeded surfaces should be left to dry before applying any waterproofing system. Concrete should not contain more than 7 % moisture by weight. Sand-cement or lightweight screeds should not contain more than 10 % moisture by weight.

PA 4.3.4.2. Where the outlets are not the full-bore outlet type of the coned type, the pipe shall be flanged to allow the waterproofing to be dressed onto a flat surface, not into a round hole.

PA 4.3.4.3. Where penetration of the waterproofing layer by services (overflow pipes, flues, etc.) occurs, particular attention shall be paid to the proper coving and dressing of the waterproof material up against the penetrating element. Penetration of the waterproof layer by fixings (for example, stands of elements, such as storage tanks or solar absorbers) shall be avoided.

NOTE The waterproofing membrane dressed around protruding pipes should be mechanically clamped (e.g. with a hose clamp) around the pipes and then counter flashed over the mechanical clamp.

PA 4.3.4.4. Waterproofing turn-ups against masonry, if not linked to the stepped damp-proof courses in cavity walls, shall be counter flashed with the same membrane and cut into the walls to a depth of at least 40 mm to prevent delamination due to moisture penetration into the walls above the waterproofing system. (See figure A.6.)

PA 4.3.4.5. Unless a specific waterproofing system does not require them, sand-cement coves with radii of not less than 45 mm shall be formed at all internal corners of horizontal and vertical surfaces or 38 mm timber fillets shall be fixed at all junctions of horizontal and vertical surfaces on timber decks.

PA 4.3.4.6. All external corners or edges where the waterproofing is to be dressed over shall be suitably rounded.

PA 4.3.4.7. The height of all damp-proof courses shall be at the level of the top of all waterproofing turn- ups.

NOTE Typical waterproofing details are shown in Annex A.

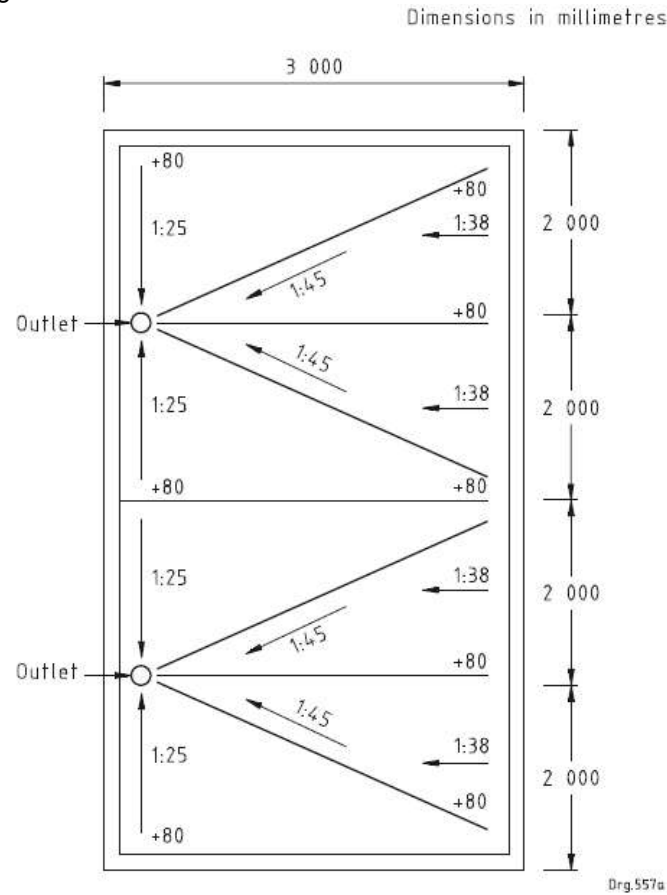


Figure 2: Drainage of Flat Roofs

NOTE Dimensions are provided for illustrative purposes. Levels indicated are with respect to the outlets

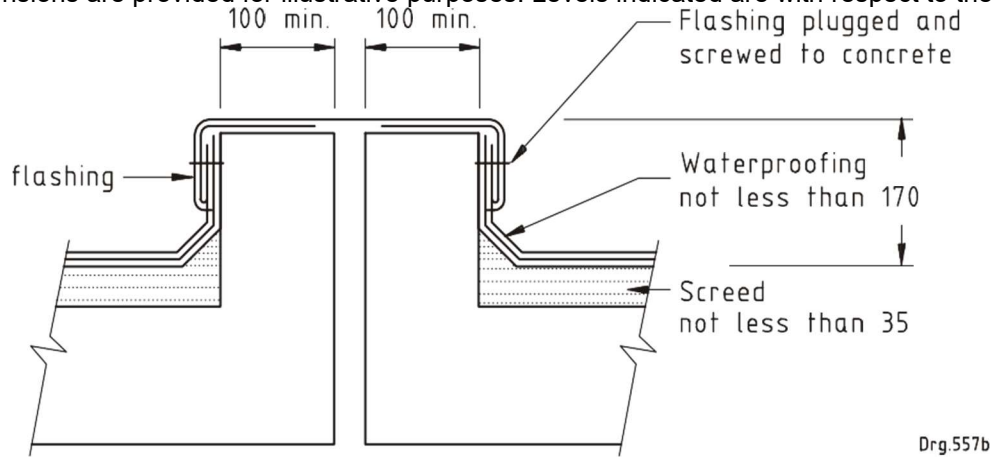


Figure 3: Twin Kerb Detail at Expansion Joints in Concrete

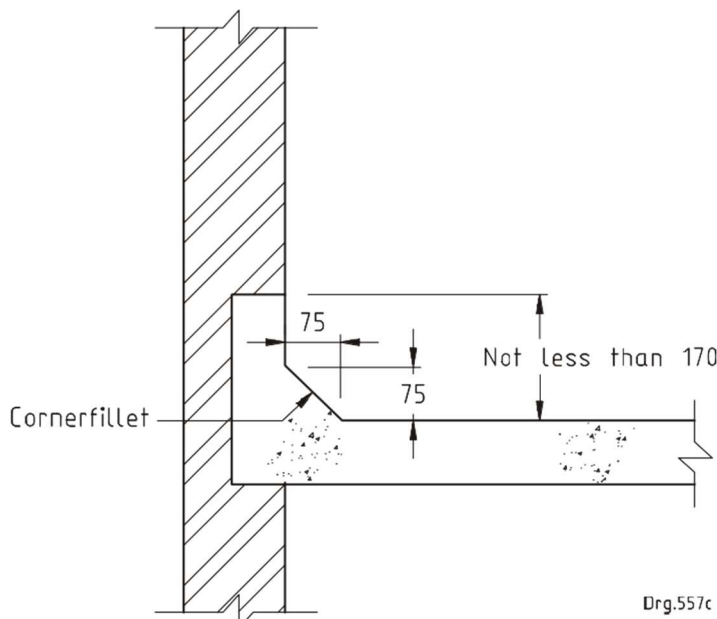


Figure 4: Upright Beam at Intersection Between Masonry Walls and Concrete Roof Slabs

NOTE Fillet can be cast in the concrete or built-up in the screed.

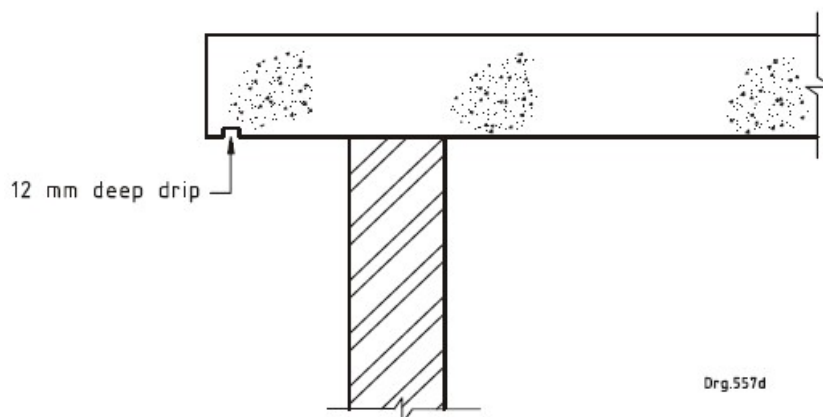


Figure 5: Drip Detail

PA 4.4. Timber Roof Construction

PA 4.4.1. Softwood Timber Construction

NOTE Only the commonly available sizes and grades of sawn SA Pine structural timber (in accordance with SANS 1783-2) and laminated pine (in accordance with SANS 1460) are given in this part of SANS 10400. Constructors should always confirm that the required sizes and grades are currently available in the required quantities. It is especially advisable to check the availability of the 50 mm × 228 mm and 76 mm × 228 mm sizes before specifying these sizes.

PA 4.4.1.1.General

PA 4.4.1.1.1...The requirements of PA 4.4.1 apply only to softwood timber roof assemblies that

- a) are not subjected to snow loading for a continuous period of 24 h;
- b) have trusses that

1. are of the Howe type (see PA 4.4.1.2), and either monopitched or double-pitched, with a clear span that does not exceed 4,0 m or 8,0 m, respectively,
2. are fully triangulated,
3. are used in gable-to-gable construction without any hips or valleys,
4. have roof pitches within the following limits:
 - tiles and slates: between 17,5° and 35°
 - metal or fibre-cement sheets: between 15° and 30°
 - metal tiles: between 15° and 30°
5. are supported at the heel joint or at the intersection between a web member and the bottom chord (tie beam) at the end of a truss, and at no other intermediate position; and
- c) have rafters with a pitch of less than 26° and purlin beams or purlin rafters that have a clear span that does not exceed 8,0 m.

PA 4.4.1.1.2...All softwood timber roof and ceiling assemblies shall

- a) be constructed in accordance with the requirements of SANS 2001-CT2,
- b) comply with the relevant requirements of SANS 1460, SANS 1783-2 or SANS 1783-4, SANS 1707-1 or SANS 1707-2 and be structurally graded and stamped (in signal red or black) with the appropriate grade mark, and
- c) be treated in accordance with the requirements of PA 4.4.1.1.3.

PA 4.4.1.1.3...Softwood timber used within the municipal boundaries (coastal areas) identified in figures 6, 7, 8 and 9 shall be treated against the effects of rot, fungus and insect attack in accordance with the requirements of SANS 10005 and SANS 1288. The cut areas of treated timber shall be thoroughly brushed with two coats of a preservative belonging to the same class as that used for the original impregnation. During transport and installation, impregnated timber shall be protected and so handled that the impregnated shell is not broken through, and the timber is not damaged in any way that might reduce the effectiveness of the preservative.

PA 4.4.1.1.4...The spacing of trusses, rafters and purlins or battens for the different roof coverings shall be in accordance with the manufacturer's instructions, or in accordance with table 4.

PA 4.4.1.1.5...Trusses, rafters and purlin beams shall be supported on wall plates of minimum size 38 mm × 76 mm or similar flat bearing surfaces which are levelled and positioned so as to ensure that the ends of such members are vertically aligned. Alternatively, trusses, rafters and purlin beams shall be supported on hangers twice bolted to walls with masonry anchors. Hangers joining timber to timber shall be either nailed in each hole with 32 mm long clout wire nails or bolted with 12 mm diameter bolts in the holes provided.

PA 4.4.1.1.6...Metal masonry anchors shall be of the expanding type, be corrosion resistant, have a diameter and length of not less than 10 mm and 75 mm, respectively, and shall be installed in accordance with the manufacturer's instructions. Such anchors, when embedded in grade 20 concrete for standard test purposes, shall have a safe working load in shear of not less than 2,5 kN certified by the manufacturer. Such certification shall be substantiated by test report certificates from an accredited testing laboratory.



Figure 6: Section of KwaZulu Natal Province (New Municipal Boundaries)



Figure 7: Section of Western Cape Province (New Municipal Boundaries)

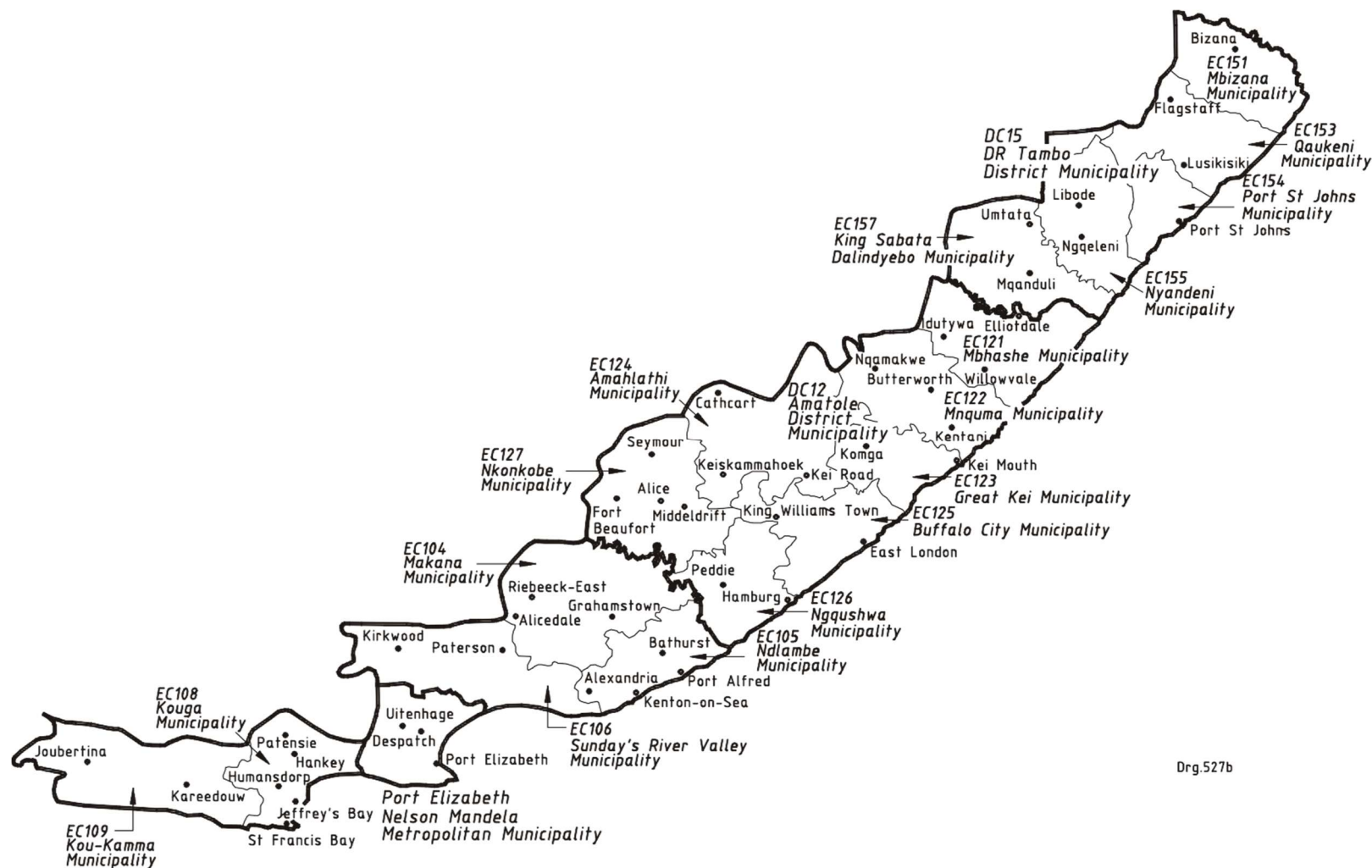


Figure 8: Section of Eastern Cape Province (New Municipal Boundaries)

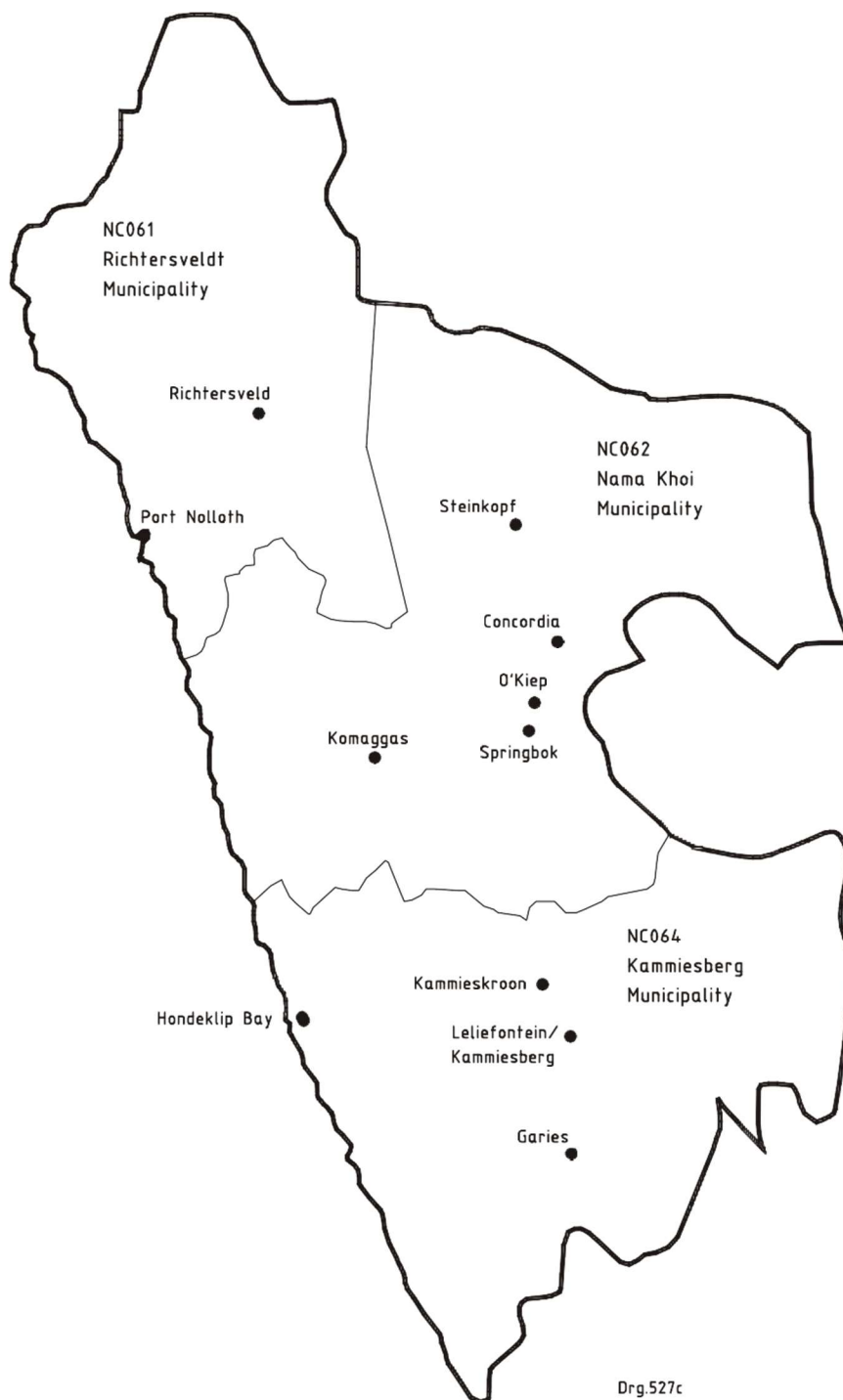
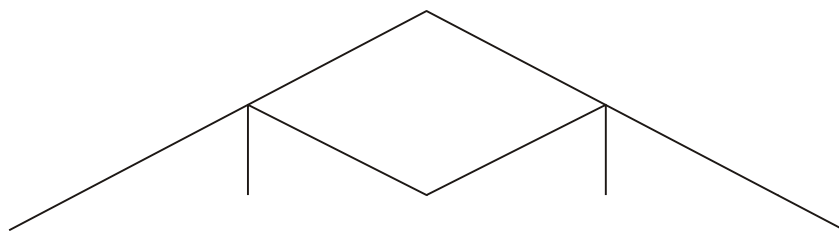


Figure 9: Section of Northern Cape Province (New Municipal Boundaries)

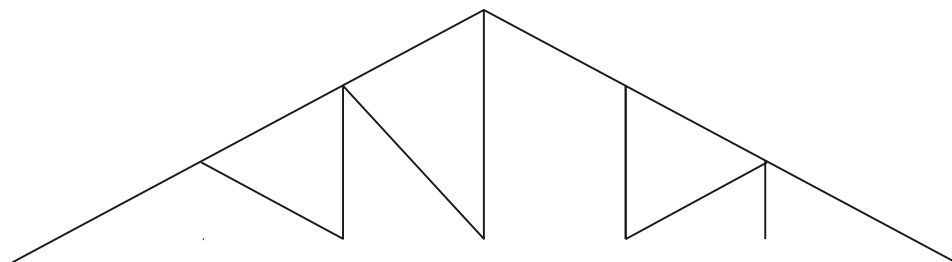
PA 4.4.1.2.Trusses

PA 4.4.1.2.1... Monopitched and double-pitched nailed and bolted trusses shall be of the Howe type (see figure 10), with the number of bays, bolts at connections, timber sizes and grades, roof pitches and centre-to-centre spacing in accordance with table 4 and figure 11, provided that no member of any truss shall have a length greater than 60 times its least dimension.

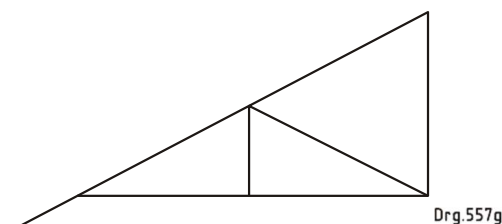
NOTE The requirement (member not to exceed 60 times least dimension) limits the length of 38 mm thick members to 2 280 mm. This limitation can, depending upon the pitch of the roof, limit the span of a truss. For example, a three-bay monopitched Howe truss will have a span that does not exceed 3,9 m, unless the width of the end member is increased.



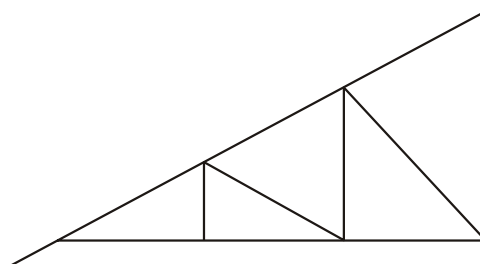
a) Four-bay Howe Truss – Maximum Clear Span of 6m



b) Six-bay Howe Truss – Maximum Clear Span of 8m



c) Two-bay Monopitched Howe Truss – Maximum Clear Span of 3m



d) Three-bay Monopitched Howe Truss – Maximum Clear Span of 4m
Figure 10: Howe Trusses

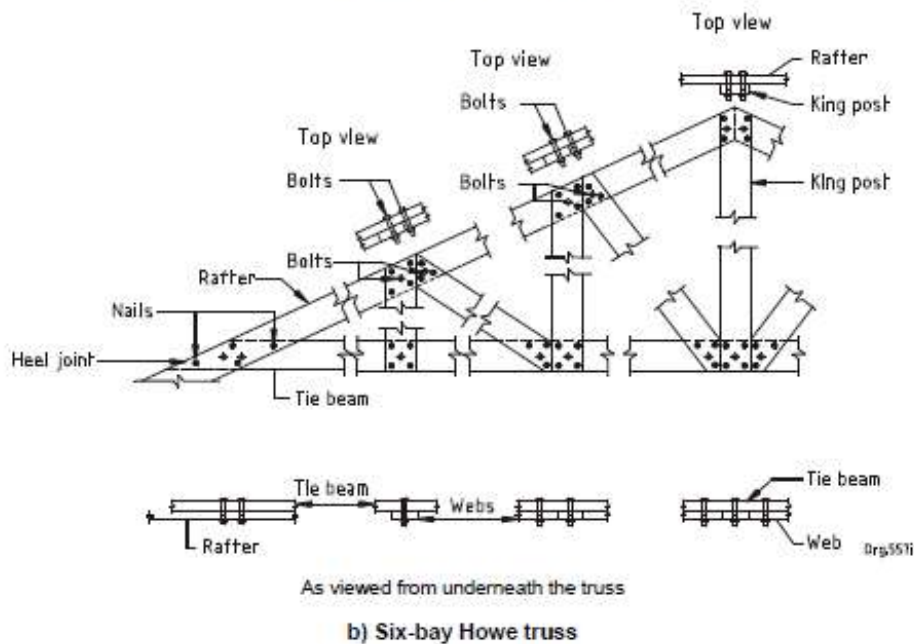
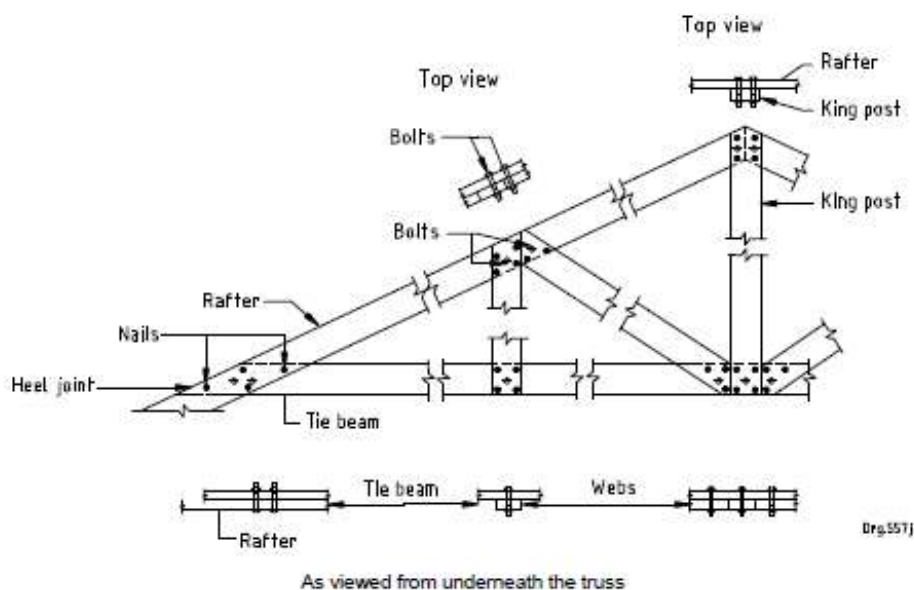
No member of any truss shall have a length greater than 60 times its least dimension.

NOTE See table 4 for member sizes and bolt arrangements at heel and splice joints.

Table 4: Howe Type Roof Trusses

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Roof covering	Pitch degrees			Maximum clear span	Maximum centre-to-centre truss spacing	Bolts at heel and splice joints (number × type)a	Member sizes and grade of timber in accordance with SANS 1783-2b, c						Number of bays
	Minimum	Maximum	Recommended				TCd		BC		Web		
							Size mm	Grade	Size mm	Grade	Size mm	Grade	
Tiles and slates with 38 mm × 38 mm battens spaced at centres that do not exceed 345 mm maximum, and in accordance with the manufacturer's instructions	17,5	35	26	3,0	760 (650 where slates or tiles have a self-mass in excess of 55 kg/m2)	2 × M12	114	5	114	5	114	5	2
				4,0					114				4
				5,0					114				4
				6,0					114				4
				6,5					114				6
				7,0					152				6
				7,5					152				6
				8,0					152				6
Metal or fibre-cement sheets with 50 mm × 76 mm purlins on edge spaced at centres that do not exceed 1 200 mm	15	30	17,5	3,0	1 200	2 × M12	114	5	114	5	114	5	2
				4,0					114				4
				5,0					114				4
				6,0					114				4
				6,5					114				6
				7,0					152				6
				7,5					152				6
				8,0					152				6
Metal tiles with 38 mm × 38 mm battens spaced in accordance with the manufacturer's instructions	15	30	20	3,0	1 000	2 × M12	114	5	114	5	114	5	2
				4,0					114				4
				5,0					114				4
				6,0					114				4
				6,5					114				6
				7,0					152				6
				7,5					152				6
				8,0					152				6
TC = top chord or rafter BC = bottom chord or tie beam													

- a Heel joints shall have 2 × M12 bolts per joint with 40 mm washers at each end.
- b All timber members shall have a thickness of 38 mm (36 mm if planed).
- c 38 mm × 114 mm grade 7 members may be substituted for 38 mm × 152 mm grade 5 material, if required.
- d The maximum overhang of a 114 mm TC is 600 mm. The TC needs to be increased to 152 mm if the overhang is greater than 600 mm but less than or equal to 900 mm.



Bolts shall have a diameter of 12 mm.
Nails shall have a length of 100 mm and shall be clinched over.

Figure 11: Howe Truss Joint Details

PA 4.4.1.2.2...Bolts and nails, unless otherwise directed, shall not be located closer to the edge of the members than the distances shown in figure 12.

PA 4.4.1.2.3... Trusses shall be supported only at the heel joints (and not on internal walls) as shown in figure 13, except where walls are set back and where extra web members are provided in accordance with figure 14.

PA 4.4.1.2.4...Splices may be provided in the tie beam (bottom chord) in accordance with figure 15.

PA 4.4.1.2.5...Roof trusses shall be tied down to the supporting walls and columns by means of a galvanized steel strap or galvanized steel wires which are built into the walls in accordance

with figure 16.

PA 4.4.1.2.6...Rafter (top chord) bracing shall be in accordance with the details shown in

- a) Figures 17(a), 18 or 19, and 20, if applicable, in respect of tiled roofs with the connection of diagonal bracing at the wall plate for stub-ended trusses in accordance with figure 21; and
- b) Figure 17(b), in respect of sheeted roofs.

PA 4.4.1.2.7...Bottom chord bracing shall be in accordance with figure 22.

PA 4.4.1.2.8...Permanent continuous runners of size 38 mm × 76 mm shall be provided and fixed to the bottom chord at the centre of each bay where no boarded ceiling, in accordance with the requirements of PA 4.4.1.6, or timber ceiling is provided.

PA 4.4.1.2.9...Trusses which are not supported at heel joints (see figure 14) shall have runners installed in accordance with figure 23 with cross bracing at intervals that do not exceed 10 m, or T-bracing on each additional web as shown in figure 14.

PA 4.4.1.2.10. Wherever possible, water tanks and hot water geysers shall be supported on timber bearers on internal walls. Where there are insufficient internal walls to support these bearers, the hot water tank or geyser may be supported on trusses by using a timber platform constructed in accordance with figure 24.

PA 4.4.1.3.Rafter Beams

PA 4.4.1.3.1...Rafter beams shall be in accordance with tables 5 to 7.

PA 4.4.1.3.2...Rafters shall be tied down to the supporting walls and columns by means of a galvanized steel strap or galvanized steel wires which are built into the walls in accordance with figure 16.

PA 4.4.1.4.Purlin Rafters and Purlin Beams

PA 4.4.1.4.1...Where pitched trusses or rafters are not used to support the roofing sheets, purlin beams or purlin rafters shall be in accordance with tables 8 and 9 and erected at the required pitch (see figure 25).

NOTE 1 Purlin beams and purlin rafters are members which double as purlins. This form of construction is only applicable to sheeted roofs.

NOTE 2 It is impractical to fix sheeted roofs to purlins of width less than 45 mm. For this reason, members of width less than 32 mm and 38 mm are not included in tables 8 and 9.

PA 4.4.1.4.2...Purlin rafters and purlin beams shall be tied down to the supporting walls and columns by means of a galvanized steel strap or galvanized steel wires which are built into the walls in accordance with figure 16.

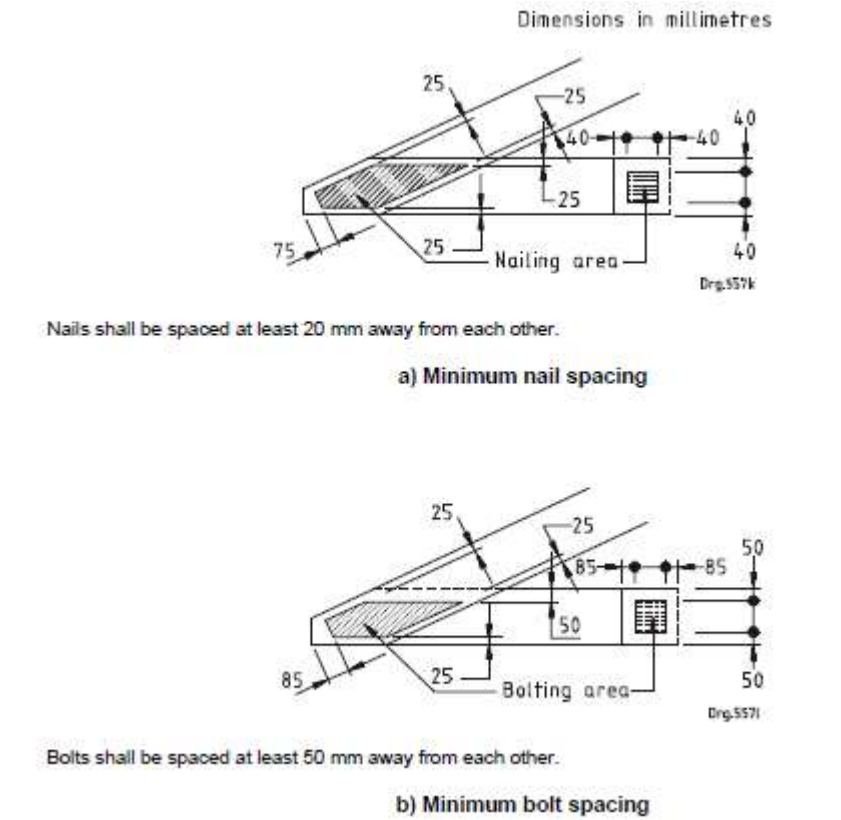


Figure 12: Nail and Bolt Spacing in Joints Between Timber Members

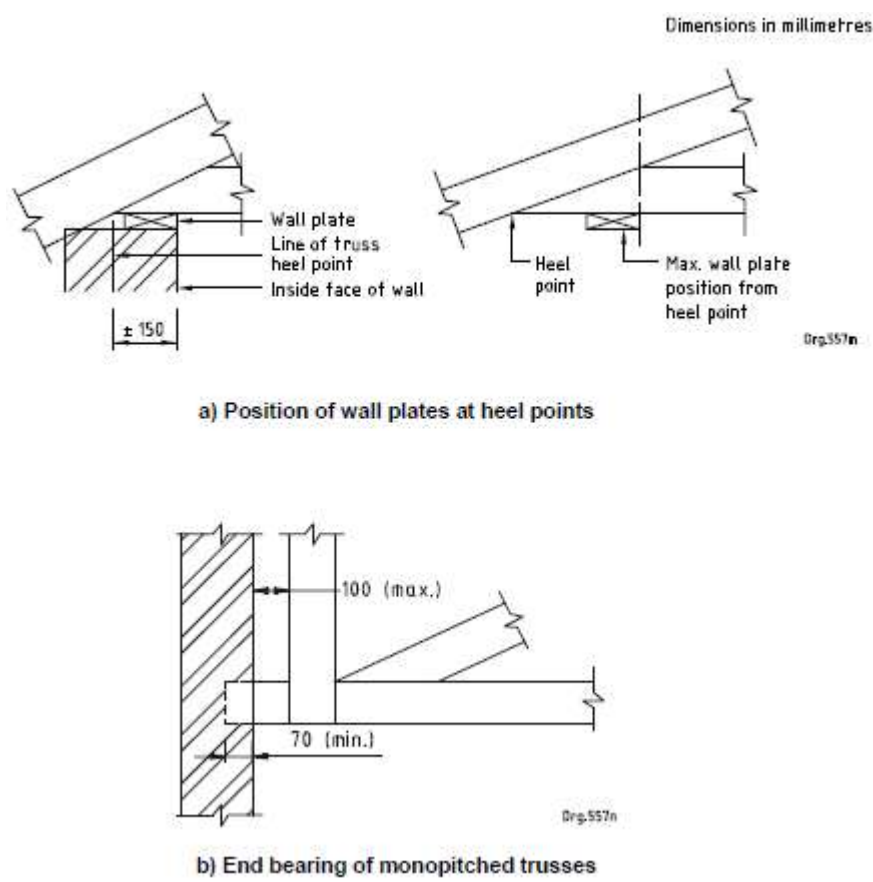
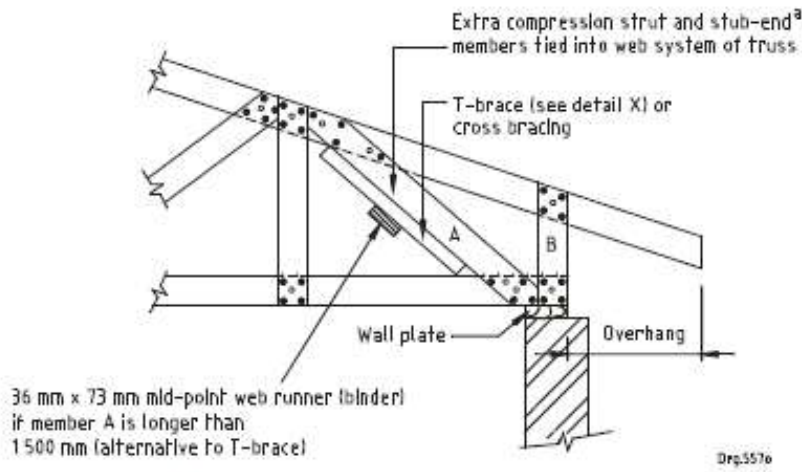
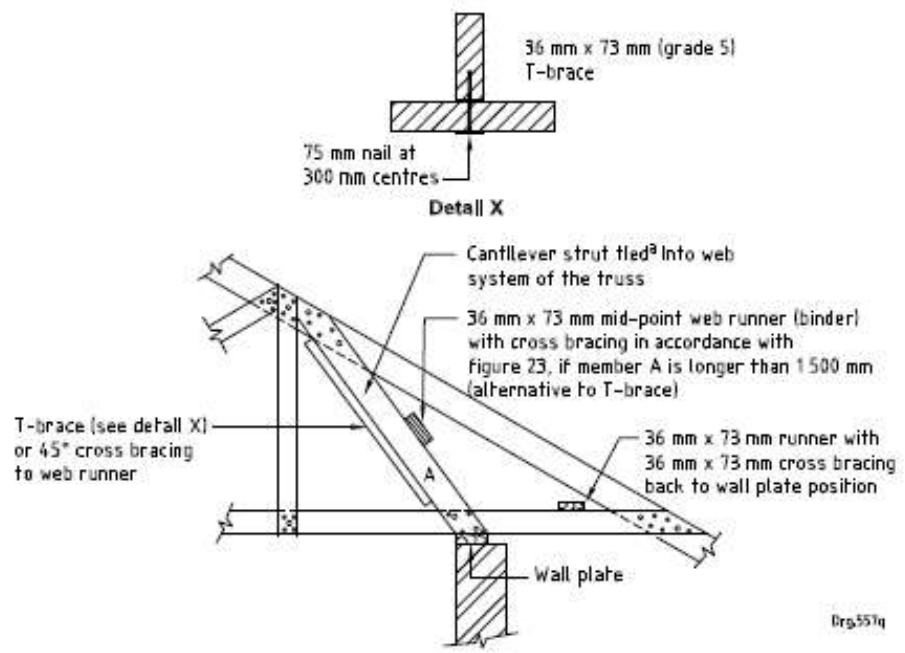


Figure 13: Truss Supports



Member A and member B shall be the same size and grade as the top chord. All other web members shall be 111 mm (grade 5). Member A shall be T-braced in accordance with detail X. All bolts shall be M12.
a Stub end shall be located over a wall plate.

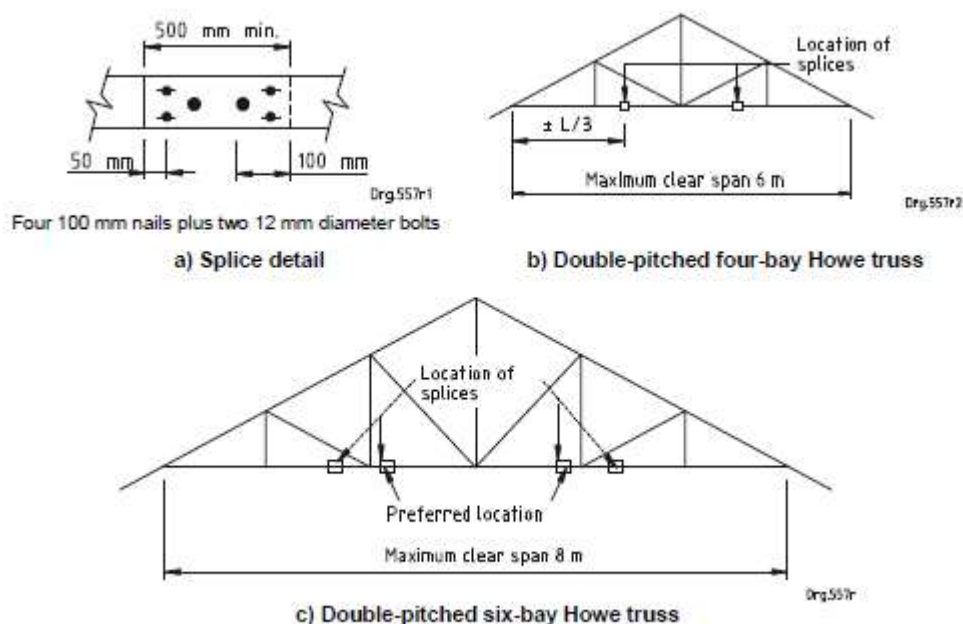
a) Stub-end trusses



Member A shall be the same size and grade as the top chord. Member A shall be T-braced in accordance with detail X. All bolts shall be M12.
a Strut end shall be located over a wall plate.

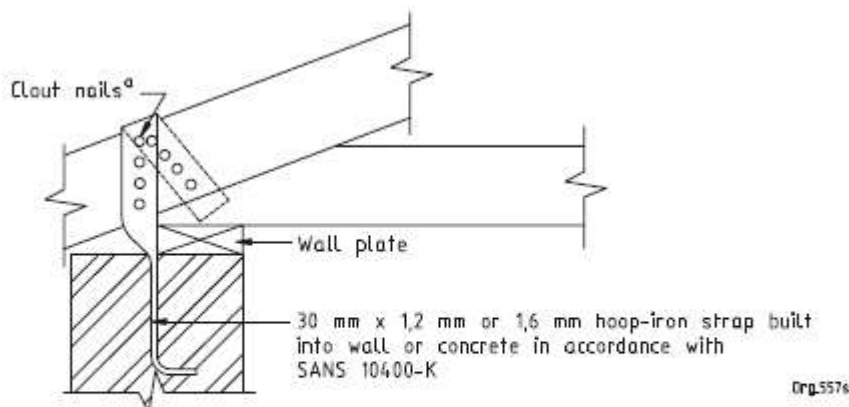
b) Howe truss supported away from heel joint

Figure 14: Howe Truss supported away from heel joint



NOTE No splices are permitted in end bays.

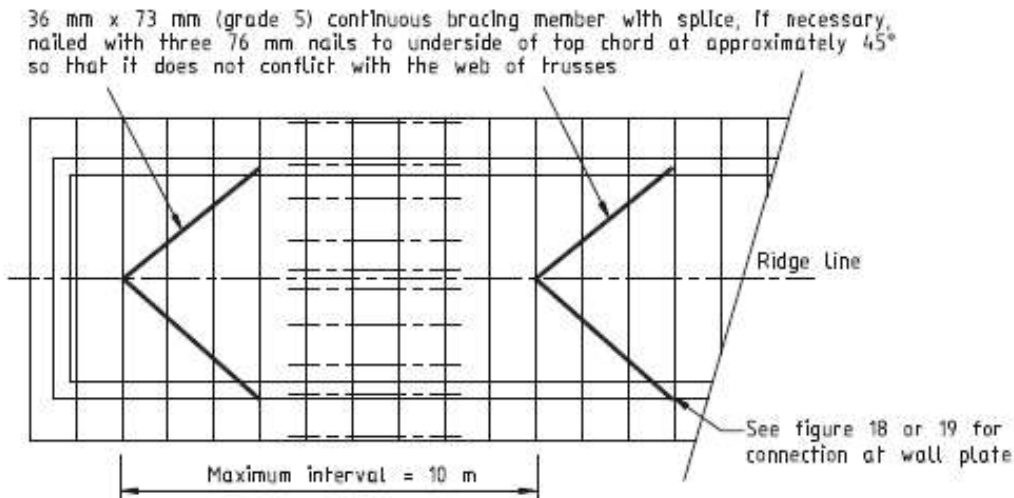
Figure 15: Splices in Howe Trusses



NOTE A double strand of 2,4 mm diameter galvanized steel wire may be used in place of hoop-iron straps in light roofs where the trusses are at centres that do not exceed 750 mm, and in all heavy roofs (see SANS 10400-K).

^a Four 32 mm clout nails (min.) (for a heavy tiled roof) or eight 32 mm clout nails (min.) (for a light sheeted roof) or three 75 mm nails.

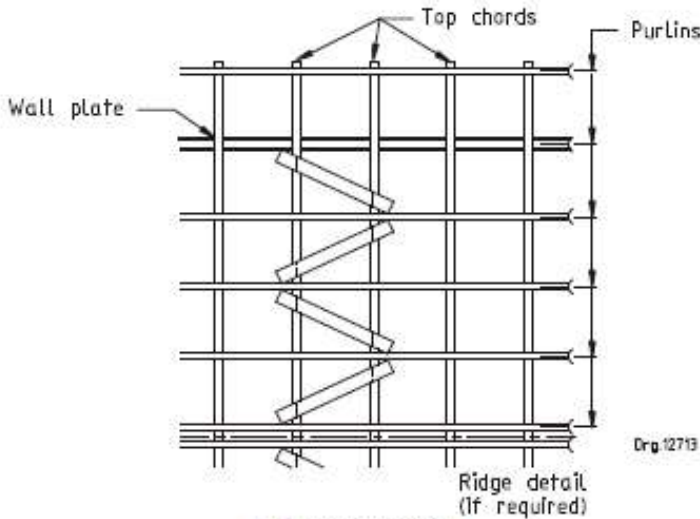
Figure 16: Holding Down Detail



Org 12713a

Plan on top chords

a) Tiled roofs



Org 12713

Plan on top chord

Bracing shall be joined above the wall plate as shown. Three 75 mm wire nails shall be provided at each connection. Bracing members shall be 36 mm x 73 mm (grade 5), wire-nailed to the top chord at approximately 45° ("zig-zag" bracing).

NOTE Similar bays should be installed at intervals that do not exceed 10 m.

b) Sheeted roofs

Figure 17: Top Chord Bracing for Tiled and Sheeted Roofs that have Clear Spans that do not Exceed 8m

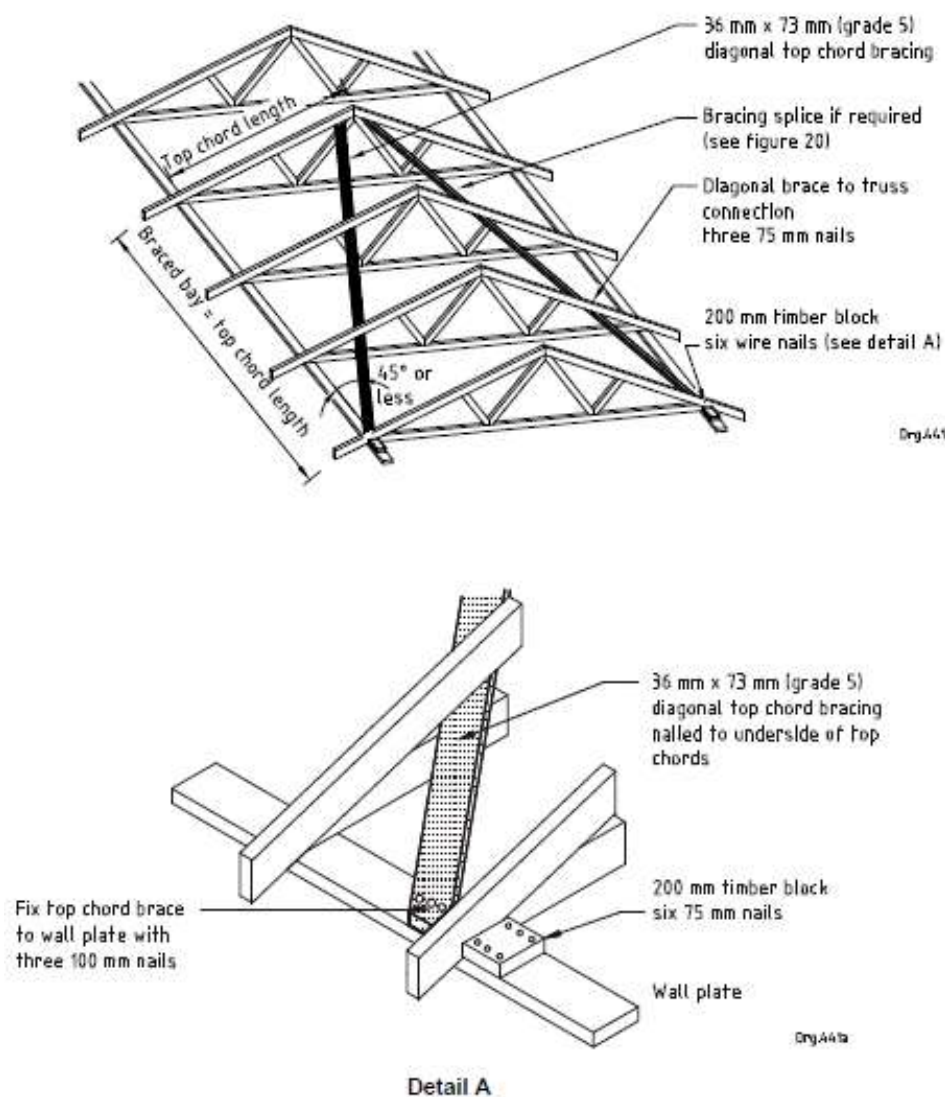


Figure 18: Alternative Top Chord Bracing Connection for Tiled Roofs that have a Clear Span that does not Exceed 6.6m

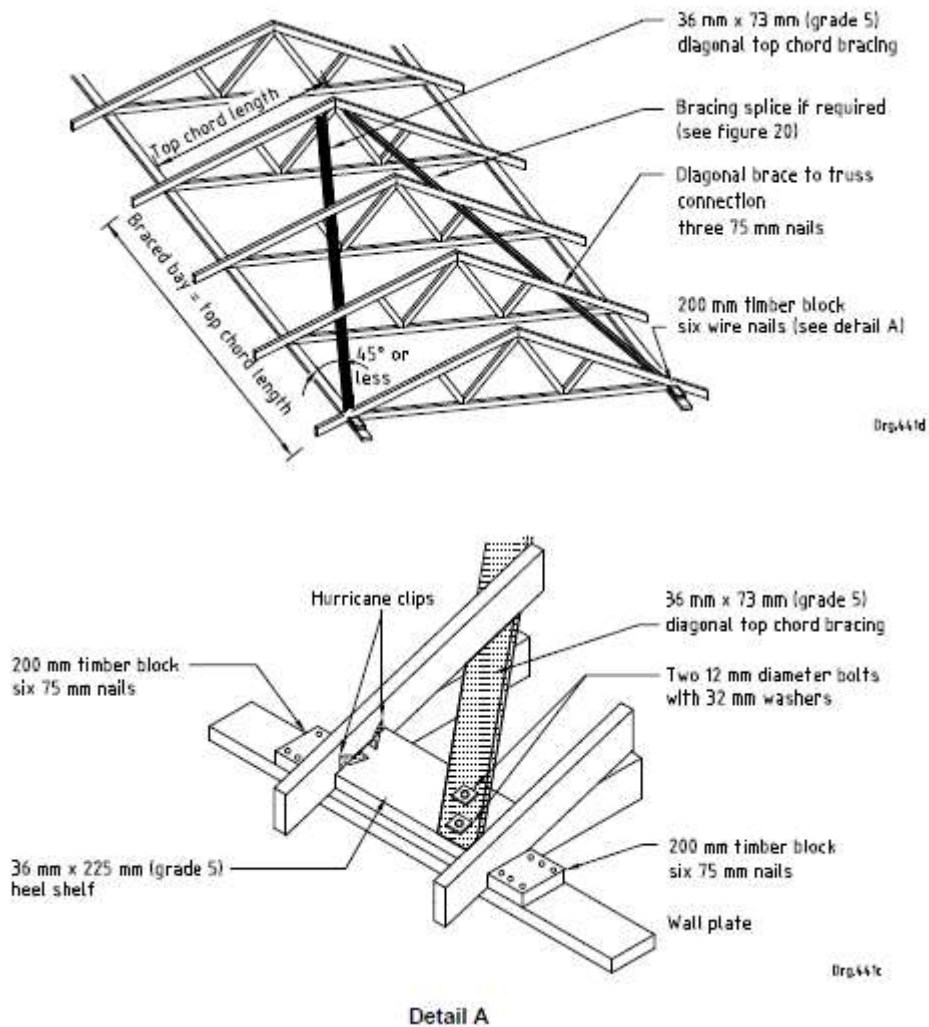
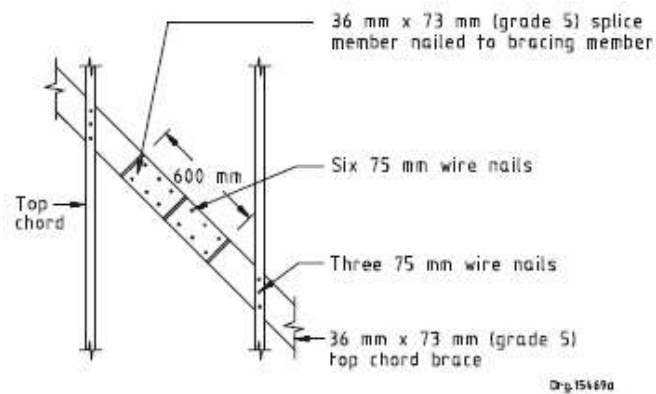
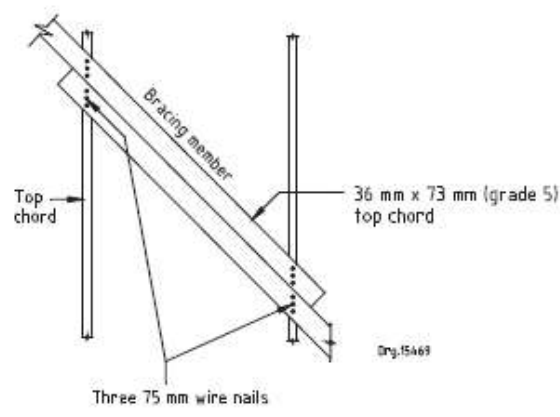


Figure 19: Alternative Top Chord Bracing for Tiled Roofs that have a Clear Span that Exceeds 6.6m

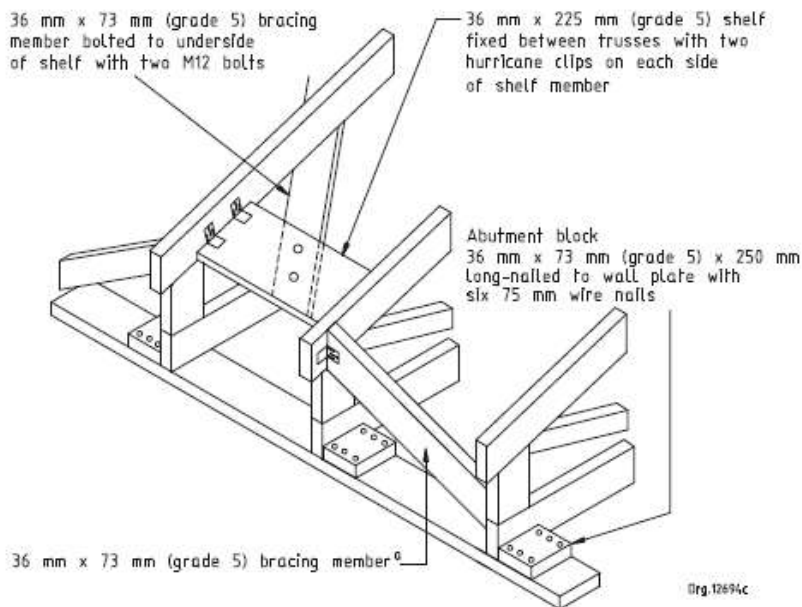


Alternative 1



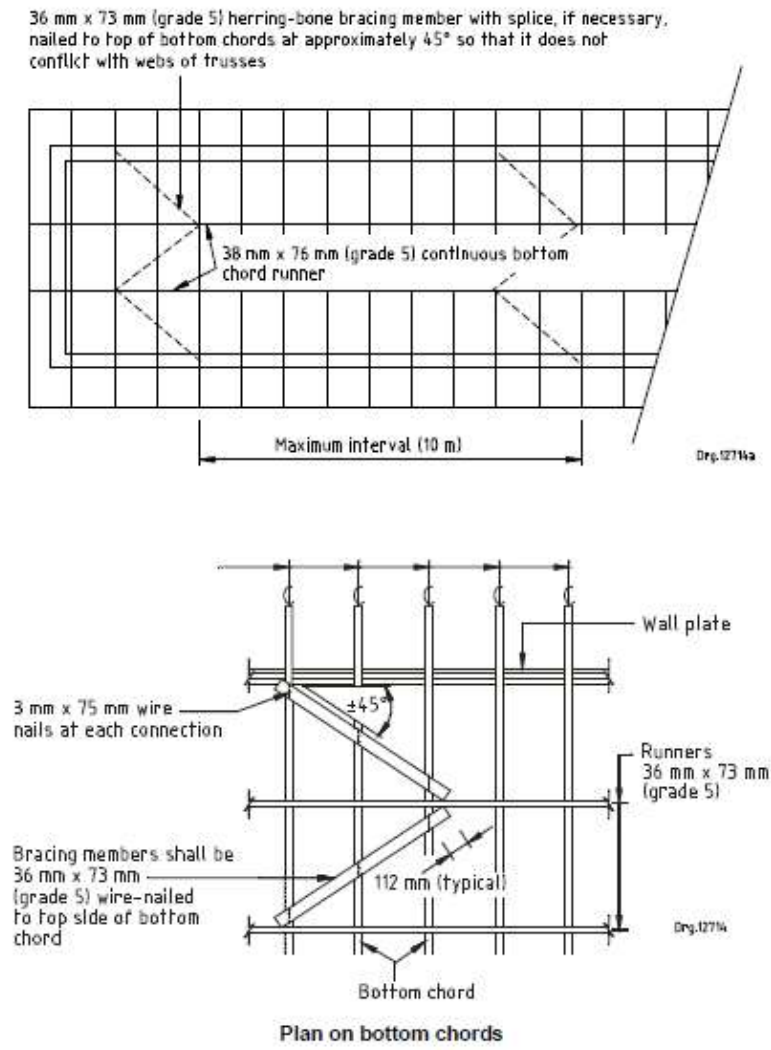
Alternative 2

Figure 20: Details of Bracing Splices



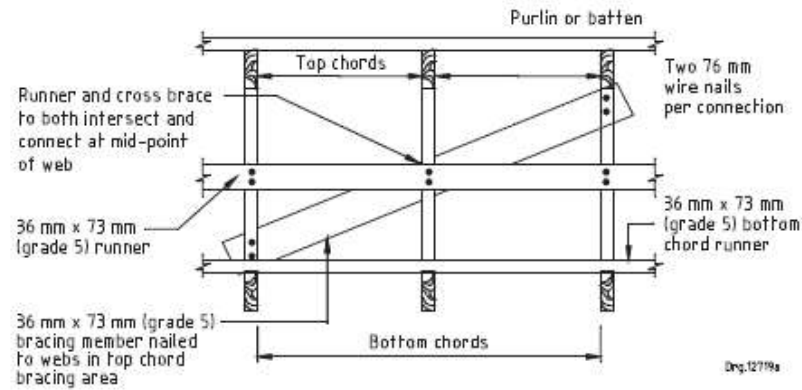
⁶ Provide bracing member on either side of shelf bay complete with abutment block and fixed with four hurricane clips. Where beam infill exists and is structurally sound, these two braces may be omitted.

Figure 21: Connection of Diagonal Bracing at Wall Plate for Stub-end Trusses



NOTE There are two 75 mm wire nails at each connection.

Figure 22: Bottom Chord Bracing for Sheeted and Tiled Roofs



Runners and cross bracing shall be on opposite sides of webs, where possible (blocking out might be necessary).

Figure 23: Typical Runner/Binder and Cross Bracing

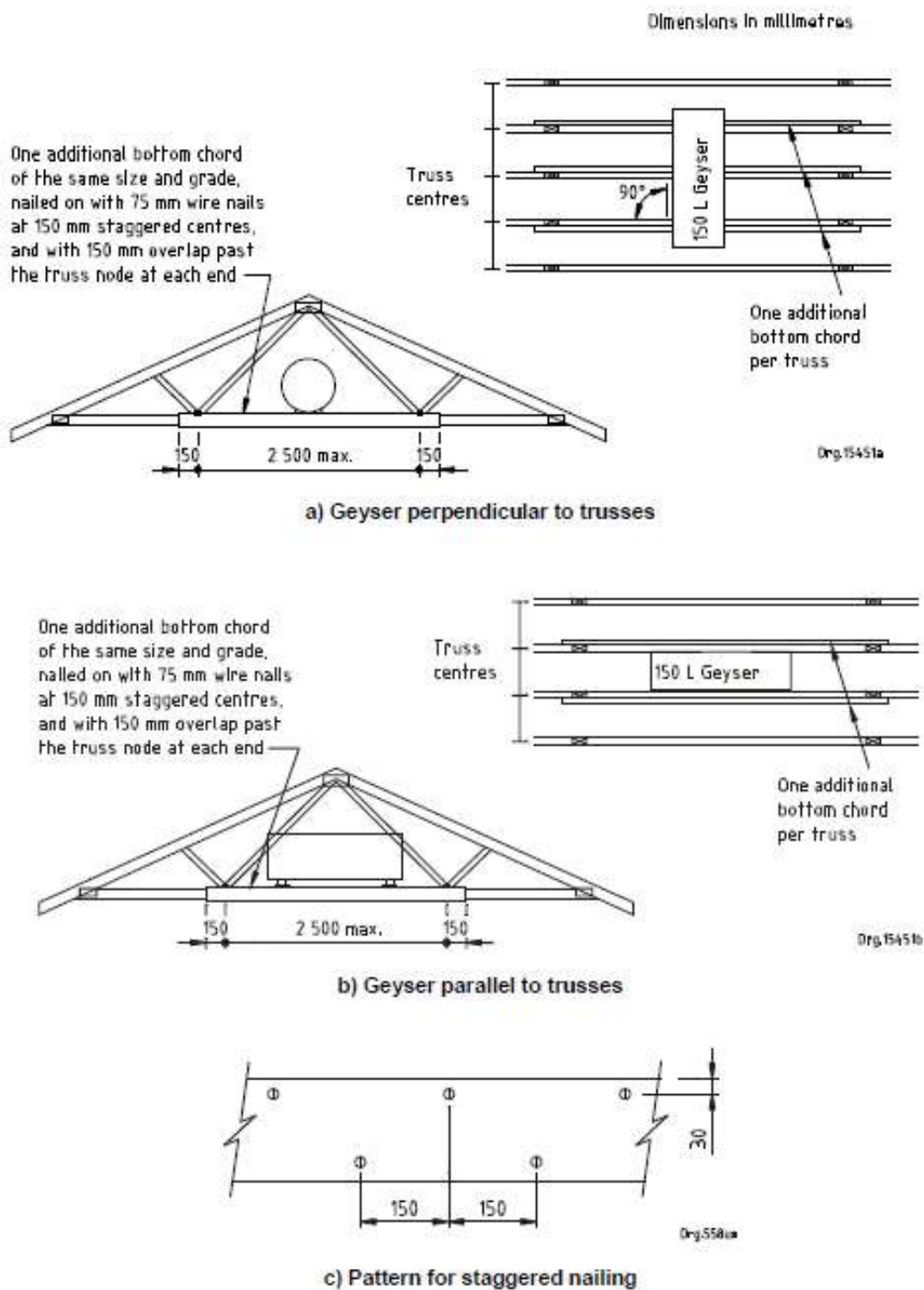


Figure 24: Geyser Support Deck for Geysers up to 150L Supported on Trusses that Have a Clear Span that Does not Exceed 8m (Only one Geyser Allowed per Three Trusses)

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Table 5: Maximum Clear Spans for Sawn Softwood Rafter Beams that Have a Pitch of Less Than 26°

1	2	3	4	5
Nominal timber size mm	Timber grade			
	5		7	
	Maximum rafter clear span m			
Type of roof covering	Rafter spacing			
Tiles or slates ^a	600 mm	760 mm	600 mm	760 mm
38 × 114	2,0	1,8	2,2	2,0
38 × 152	2,8	2,4	3,0	2,8
38 × 228	4,3	3,8	4,7	4,3
50 × 152	3,1	2,8	3,4	3,1
50 × 228	4,8	4,4	5,1	4,8
76 × 228	5,4	5,2	—	—
Metal or fibre-cement sheets	Rafter spacing			
	1 000 mm	1 400 mm	1 000 mm	1 400 mm
38 × 114	2,2	1,8	2,5	2,1
38 × 152	3,0	2,5	3,5	2,9
38 × 228	4,5	3,8	5,3	4,4
50 × 152	3,4	2,8	4,0	3,4
50 × 228	5,2	4,3	6,0	5,1
76 × 228	6,3	5,3	—	—
Metal tiles	Rafter spacing			
	1 000 mm	1 200 mm	1 000 mm	1 200 mm
38 × 114	2,2	2,0	2,6	2,3
38 × 152	3,0	2,7	3,5	3,2
38 × 228	4,5	4,1	4,3	4,8
50 × 152	3,4	3,1	4,0	3,6
50 × 228	5,2	4,7	6,0	5,5
76 × 228	6,3	5,7	—	—
a Maximum mass of tiles or slates, including battens or purlins, shall not exceed 65 kg/m2.				

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Table 6: Maximum Clear Spans for Laminated SA Pine Rafters that Support Tiled or Slated Roofs that Have a Pitch of Less Than 26°

1	2	3
Nominal timber size mm	Maximum rafter clear span m	
	Rafter spacing	
	600 mm	760 mm
32 × 133a	2,0	1,8
45 × 133a	2,5	2,2
70 × 133a	3,0	2,7
32 × 166	2,6	2,3
45 × 166	3,2	2,8
70 × 166	3,8	3,5
45 × 200a	3,9	3,5
70 × 200a	4,9	4,2
45 × 233	4,6	4,1
70 × 233	5,3	4,9
70 × 266a	6,1	5,7
70 × 300	6,9	6,4
70 × 333a	8,0	7,1
70 × 366	8,0	7,8
70 × 400a	8,0	8,0
100 × 400	8,0	8,0
Laminated beams shall comply with the requirements of SANS 1460. Laminated beams shall be grade 5 or higher.		
The maximum mass of tiles or slates, including battens or purlins, shall not exceed 65 kg/m ² .		
a Commonly available sizes.		

Table 7: Maximum clear spans for laminated SA Pine rafters that support profiled metal or fibre-cement sheeting or metal tiles that have a pitch of less than 26°

1	2	3	4	5
Nominal timber size mm	Maximum rafter clear span m			
	Rafter spacing			
	750 mm	900 mm	1 000 mm	1 200 mm
32 × 133a	2,5	2,2	2,1	1,9
45 × 133a	3,0	2,8	2,6	2,3
70 × 133a	3,8	3,5	3,3	3,0
32 × 166	3,1	2,8	2,7	2,4
45 × 166	3,8	3,5	3,3	3,0
70 × 166	4,8	4,4	4,1	3,8
45 × 200a	4,6	4,2	4,0	3,6
70 × 200a	5,3	5,3	5,0	4,6

Table 7_Continued

1	2	3	4	5
Nominal timber size mm	Maximum rafter clear span m			
	Rafter spacing			
	750 mm	900 mm	1 000 mm	1 200 mm
45 × 233	5,4	4,9	4,7	4,2
70 × 233a	6,7	6,2	5,8	5,3
70 × 266a	7,7	7,0	6,7	6,1
70 × 300	8,0	7,9	7,5	6,8
70 × 333a	8,0	8,0	8,0	7,5
70 × 366	8,0	8,0	8,0	8,0
70 × 400a	8,0	8,0	8,0	8,0
Laminated beams shall comply with the requirements of SANS 1460. Laminated beams shall be grade 5 or higher.				
a Commonly available sizes.				

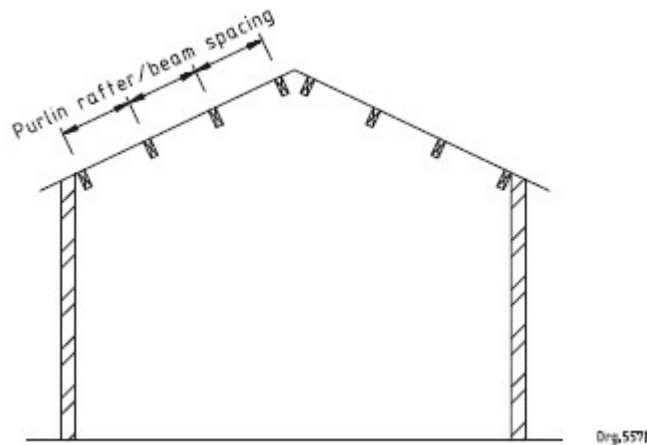


Figure 25: Typical Arrangement of Purlin Rafter/Purlin Beam Construction (See Tables 8 and 9)

Table 8: Maximum clear spans for sawn SA Pine/purlin rafters/purlin beams that support profiled metal or fibre-cement sheeting

1	2	3	4	5	6	7	8	9
Nominal timber size mm	Maximum clear span m							
	Purlin rafter or purlin beam spacing							
	750 mm		1 000 mm		1 200 mm		1 400 mm	
	Timber grade							
	5	7	5	7	5	7	5	7
50 × 152	4,0	4,7	3,4	4,0	3,1	3,6	2,9	3,4
50 × 228	6,0	6,8	5,2	6,0	4,7	5,5	4,3	5,1
76 × 228	7,2	–	6,3	–	5,7	–	5,3	–

Table 9: Maximum clear spans for laminated SA Pine purlin rafters/purlin beams that support profiled metal or fibre-cement sheeting

1	2	3	4	5
Nominal timber size mm	Maximum clear span m			
	Purlin rafter or beam spacing			
	750 mm	900 mm	1 200 mm	1 500 mm
45 × 133a 70 × 133a	3,0 3,8	2,8 3,5	2,3 3,0	2,1 2,7
45 × 166 70 × 166	3,8 4,8	3,5 4,4	3,0 3,8	2,7 3,4
45 × 200a 70 × 200a	4,6 5,8	4,2 5,3	3,6 4,6	3,2 4,1
45 × 233 70 × 233	5,4 6,7	4,9 6,2	4,2 5,3	3,8 4,8
70 × 266a	7,7	7,0	6,1	5,4
70 × 300	8,0	7,9	6,8	6,1
70 × 333a	8,0	8,0	7,5	6,7
70 × 366a	8,0	8,0	8,0	7,6
70 × 400a	8,0	8,0	8,0	8,0
Laminated beams shall comply with the requirements of SANS 1460. Laminated beams shall be grade 5 or higher.				
a Commonly available sizes.				

PA 4.4.1.5.Battens and Purlins

PA 4.4.1.5.1...Battens and purlins shall be continuous over at least three rafters (i.e. two rafter spacings) and shall be fixed to every rafter that they cross. Battens of size 38 mm × 38 mm shall be nailed to rafters with 75 mm wire nails and 38 mm × 50 mm battens shall be set on edge with 90 mm wire nails. Purlins shall be fixed to rafters in accordance with figures 26 and 27. The sizes and spacing of battens and purlins shall be in accordance with table 4.

PA 4.4.1.5.2... The ends of battens and purlins shall be sawn square and butt-jointed centrally over the rafter member so as to provide adequate bearing and fixing. Alternatively, battens may be spliced in close proximity to rafters by means of nailed splices or connector plates as shown in figure 27.

PA 4.4.1.5.3...Joints in battens shall be arranged so that not more than one batten in three is joined on any one rafter or truss.

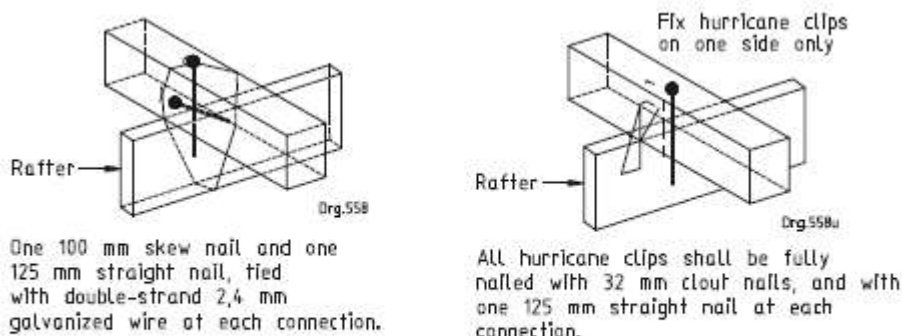
PA 4.4.1.5.4...Purlins shall be spliced in accordance with the details shown in figure 28. Splices shall be located in close proximity to rafters and shall be staggered so that there is not more than one splice in three consecutive purlins. Purlins and batten splices shall not be located within 1,5 m of the gable ends.

PA 4.4.1.6.Ceiling Assembly

PA 4.4.1.6.1...Branding shall comply with the requirements of SANS 1783-4 or SANS 1707-2 and shall be installed in accordance with the relevant requirements of SANS 2001-CT2. Where saligna branding is used, it shall be treated against the effects of rot, fungus and insect attack with CCA (Copper Chrome Arsenate) or a similar approved preservative, for example

Boron, in accordance with the requirements of SANS 10005 and SANS 1707-2.

PA 4.4.1.6.2...Pine brandering of size 38 mm × 38 mm required to support gypsum plasterboard, fibre- cement board or similar board shall be securely spiked to the supporting timbers with 75 mm wire nails at centres that do not exceed 450 mm. Cross brandering shall be cut in between the longitudinal brandering and skew-nailed to the same using 75 mm wire nails at centres that do not exceed 900 mm.

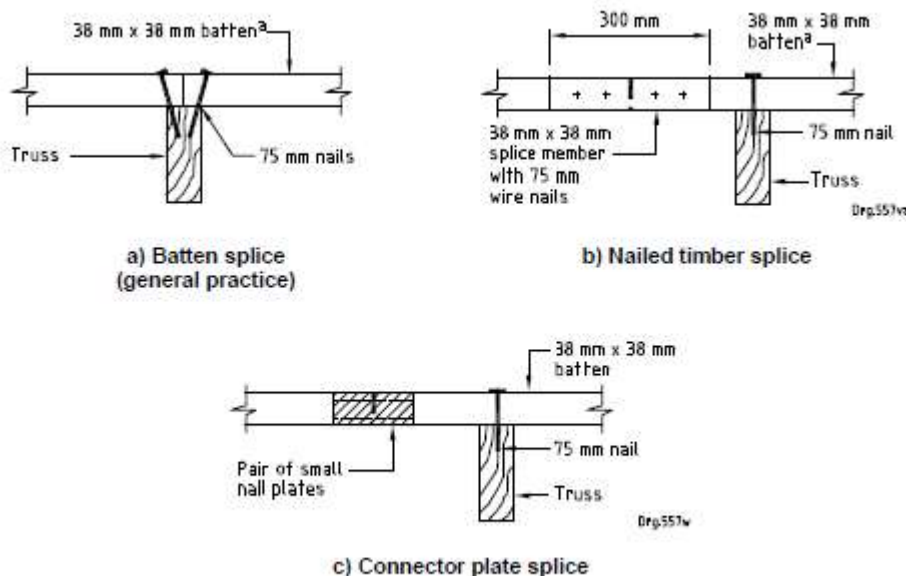


a) Tied connection

b) Hurricane clip connection

NOTE For aesthetic purposes, the hurricane clip connections are usually used at eaves overhangs, whilst wire is often used for connections hidden by ceilings.

Figure 26: Purlin to Rafter Connection Details



a) Batten splice (general practice)

b) Nailed timber splice

c) Connector plate splice

* Joints in battens shall be staggered so that not more than one in three is spliced on any one rafter.

Figure 27: Splicing of Battens

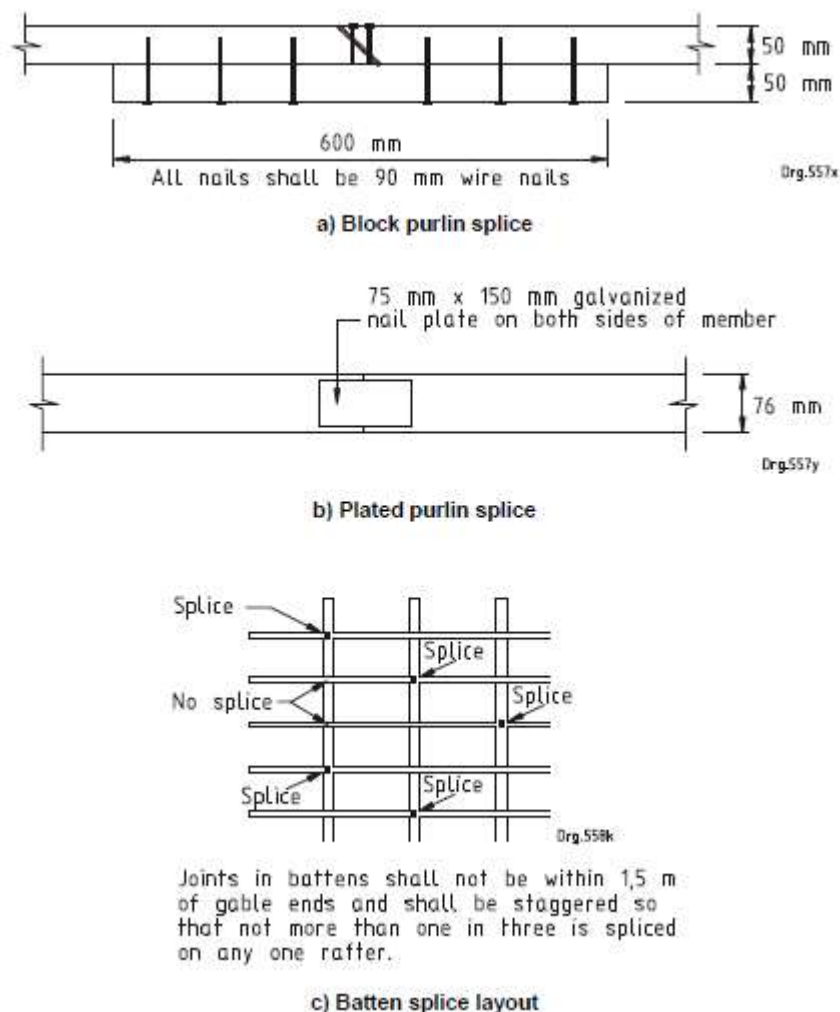


Figure 28: Typical Layout of Batten and Purlin Splices

PA 4.4.2. Pole Construction

PA 4.4.2.1.Poles shall comply with the requirements of SANS 457-2 (softwoods) or SANS 457-3 (hardwoods) and shall be treated in accordance with the requirements of SANS 10005. Poles which have cracked or split pole ends within one pole diameter location of a bolt location, shall not be incorporated into such structures.

PA 4.4.2.2.When poles are reshaped or re-sawn to a different length, the end grain of the exposed ends shall be treated with a class W preservative. A new nail plate, that covers at least 35 % of the surface area of the pole end, shall be nailed to the end to prevent and minimize excessive cracking.

PA 4.4.2.3.Laths used in thatched roof construction shall have a minimum diameter of 25 mm, shall comply with the requirements of SANS 1288, and shall be spaced in accordance with the requirements of SANS 10407.

PA 4.4.2.4.Thatched roofs constructed of poles in gable-to-gable construction without any hips, valleys or dormer windows, and that have a pitch of 45° and a clear span that does not exceed 6 m, shall be in accordance with figure 29, and shall be constructed in accordance with the requirements of SANS 10407.

PA 4.4.2.5.Pole rafters shall have a clear span in accordance with table 10.

PA 4.4.2.6. Pole trusses and rafters shall be tied down to the supporting walls and columns by means of galvanized steel wires, which are built into the walls in accordance with the requirements of SANS 10400-K.

Table 10: Maximum Clear Spans for Gum Pole Rafters

1	2	3	4
Type of roof covering	Diameter of pole mm	Maximum clear span m	
		Rafter spacing	
		750 mm	900 mm
Tiled roofs that have a pitch of less than 26°	100 to 125	2,7	2,5
	125 to 150	3,5	3,3
	150 to 175	4,4	4,1
Sheeted roofs that have a pitch of less than 26°	100 to 125	3,8	3,5
	125 to 150	4,8	4,5
	150 to 175	5,8	5,5
The maximum mass of the tiles or slates, including battens or purlins, shall not exceed 65 kg/m ² .			

PA 4.5. Fire Resistance and Combustibility

PA 4.5.1. The fire resistance of any roof or ceiling assembly (or both), complete with light fittings or any other component which penetrates the ceiling, and the degree of non-combustibility of such assembly shall comply with the relevant requirements in SANS 10400-T and SANS 10400-V, as applicable.

PA 4.5.2. No part of the roof or ceiling assembly, made of wood or any other combustible material, shall pass through a separating element of a building (in accordance with the requirements of SANS 10400-T).

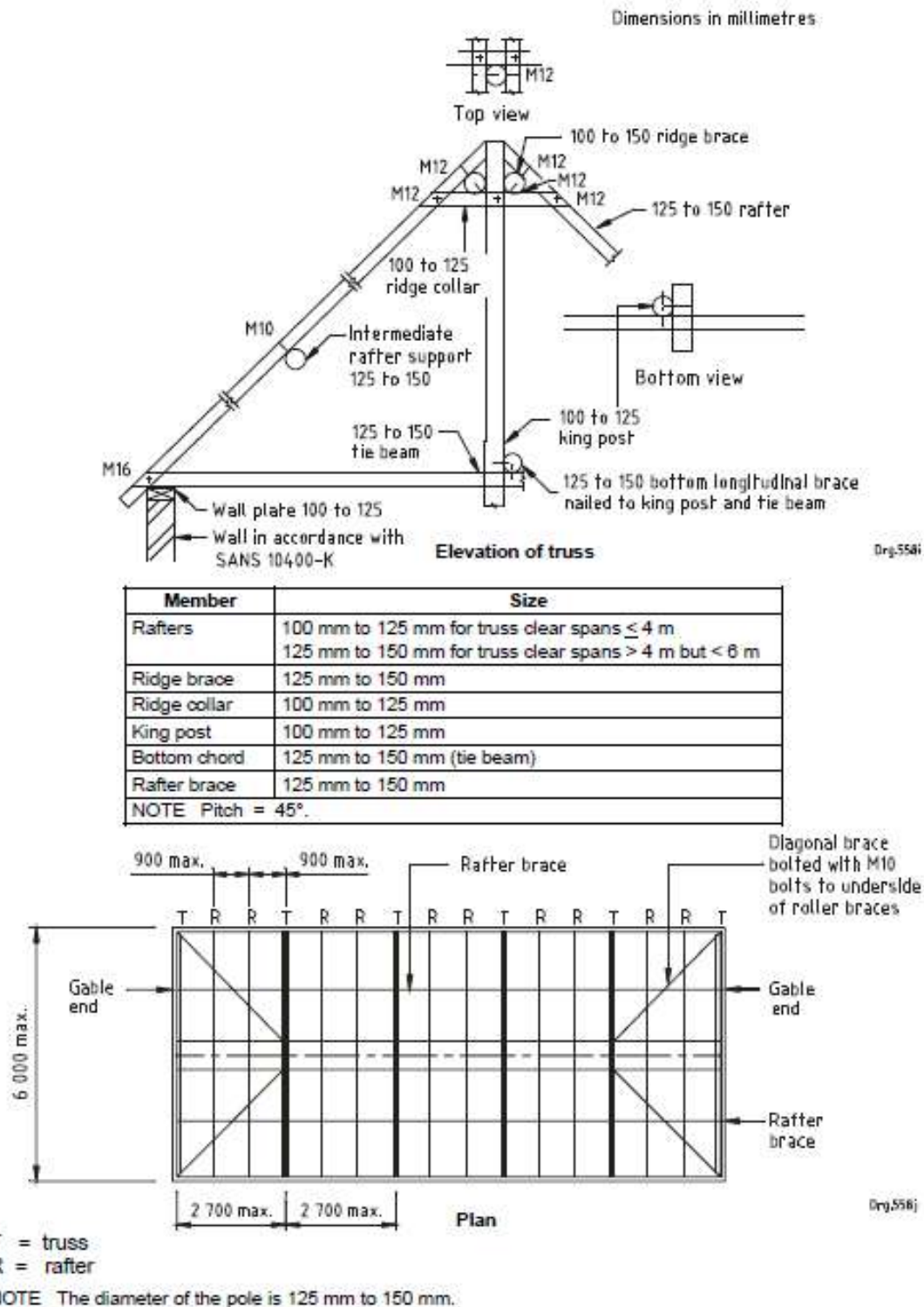


Figure 29: Truss for thatch roofing in gable-to-gable rectangular buildings that have a clear span that does not exceed 6,0 m

PA 5. . MEASUREMENT AND PAYMENT

PA 5.1.....General

All items in this section will be measured by number, square metre or linear metre completed and the Bided rates shall include full compensation for the supply, delivery, handling and installation of all materials, the provision of all necessary labour and supervision, transport, plant, equipment, and incidentals necessary to complete, protect and maintain the works as specified or as shown on the drawings.

Where a lump sum is required for a complete structure, the Bided rate shall include all items and contingencies, as specified in this section or as shown on the drawings.

PA 5.2.....Scheduled Items

PA 5.2.1. Asbestos Cement Removal Unit: Indicated in BoQ

All asbestos work is to be priced and executed by a suitably registered asbestos contractor. The registered contractor may only carry out work for which the entity is registered. The registered asbestos contractor shall also ensure adherence to all the relevant requirements of the Asbestos Abatement Regulations of 2020.

PA 5.2.2. Cladding and Sheeting Unit: m², m & No.

The rate shall cover the cost of providing and fixing all roof covering material as prescribed, including all flashings, soakers, valleys, ridge coverings, roofing screws and all other fixtures required to complete the work, as specified.

For the Roof

Supplier produced, IBR profiled roof sheeting with a coating mass of no less than AZ 150 and a total coated thickness of 0.53mm. Said profile to be coated with a modified polyester paint system as manufactured by the approved supplier, in a colour finish to match existing or as per client preference. Sheeting to be fixed using FIXTITE (or similar approved) fasteners to intermediate timber purlins at 2100mm centres, and to ridge and eave spans at 1800mm centres, with a 12 x 85mm wafer head Timberfix or suitable Manufacturer approved wafer hex self-drilling fastener with a Class 4 coating mass at every second crest, at immediate purlins and at every crest at eave purlins, all in accordance with the manufacturer's recommendations.

The Sheeting shall be IBR as manufactured by an approved supplier. The profile shall be roll-formed with 5 trapezoidal ribs at 171 mm centers, with an effective cover width of 686 mm. The rib height shall be 36.5 mm and shall be fixed in accordance with the manufacturer's recommendations."

For the Cladding

Supplier produced IBR profiled roof sheeting with a coating mass of no less than AZ150 and to a total coated thickness of 0.53mm. Said profile to be coated with a modified polyester paint system to match the colour of the newly renovated workshops on campus. Sheeting to be fixed to steel sheeting rails at 2400mm centres using 12x25mm (every second crest) self-tapping fasteners with ERDM seals with a Class 4 coating mass. The IBR profile shall be roll-formed with 5 trapezoidal ribs at 171 mm centres, with an effective cover width of 686 mm. The rib height shall be 36.5 mm and shall be fixed in accordance with the manufacturer's recommendations.

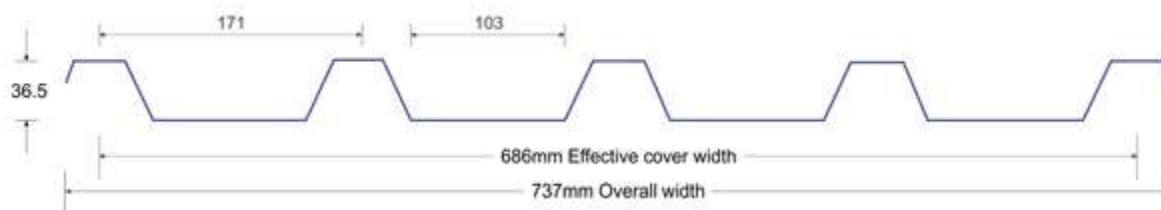


Figure 30: IBR Roof Sheeting Profile

Installation Notes:

Always drive the fasteners perpendicular to the sheeting.
It is recommended that side laps be stitched at 500mm of the rib centres with a #14 x 22mm stitching fastener.
It is further recommended that every second rib is fixed at the eaves, ridges, and the apex of the roof.
Side and end laps are to be sealed using a suitable butyl product or neutral cure Silicone.

For the Flashings:

Supplier produced, CLASSICORR CORRUGATED 462mm Girth Ridge Flashing (or similar approved) with a coating mass of no less than AZ 150 and a total coated thickness (TCT) of 0.53mm. Flashings to be with a modified polyester paint system as manufactured by the approved supplier, in a “Sunset Red” finish or in a colour to match existing or as per client request. Flashings to be fixed with a 14 x 22mm hexagon head metalfix FIXTITE stitching screw or suitable similar approved alternative fastener with a Class 4 coating mass, all in accordance with the manufacturer’s recommendations.”

PA 5.2.3. Demolish and Remove Structures.Unit: m²

The requirements of SANS1200 – C (Site Clearance) clause 8.2.8 shall apply for all items measured under this item.

PA 5.2.4. Structural SteelworkUnit: Indicated in BoQ

The rate shall cover the complete cost of supplying all materials, applying, fixing, and installation of structural steel members, gutters and downpipes in strict accordance with the requirements of SANS1200 H and SANS10400-R as well as supplier specification. Provision for the removal of old gutters, downpipes and fixings should also be made in the rate.

PA 5.2.5. Sanding down and PaintingUnit: m²

Only the surface covered by the final finishing coat shall be measured.

The rate shall cover the cost of surface preparation, supplying and applying all the coats of paint, repairing any damaged surfaces, and all materials necessary for completing the work. All painting shall be in strict accordance with supplier specification and to a colour either matching the existing colour or as instructed by the client.

PA 5.2.6. Structural Timber.... Unit: m

The rate shall cover the complete cost of supplying all materials, applying, fixing, and installation of structural timber members as indicated in the Bill of Quantities in strict accordance with the requirements of the SANS10400-L: 2011 specification.

PA 5.2.7. Roof Insulation..... Unit: m²

The rate shall cover the cost of the complete supply, delivery and installation of all materials required, as specified and in strict accordance with supplier specification.

PA 5.2.8. Doors Unit: No

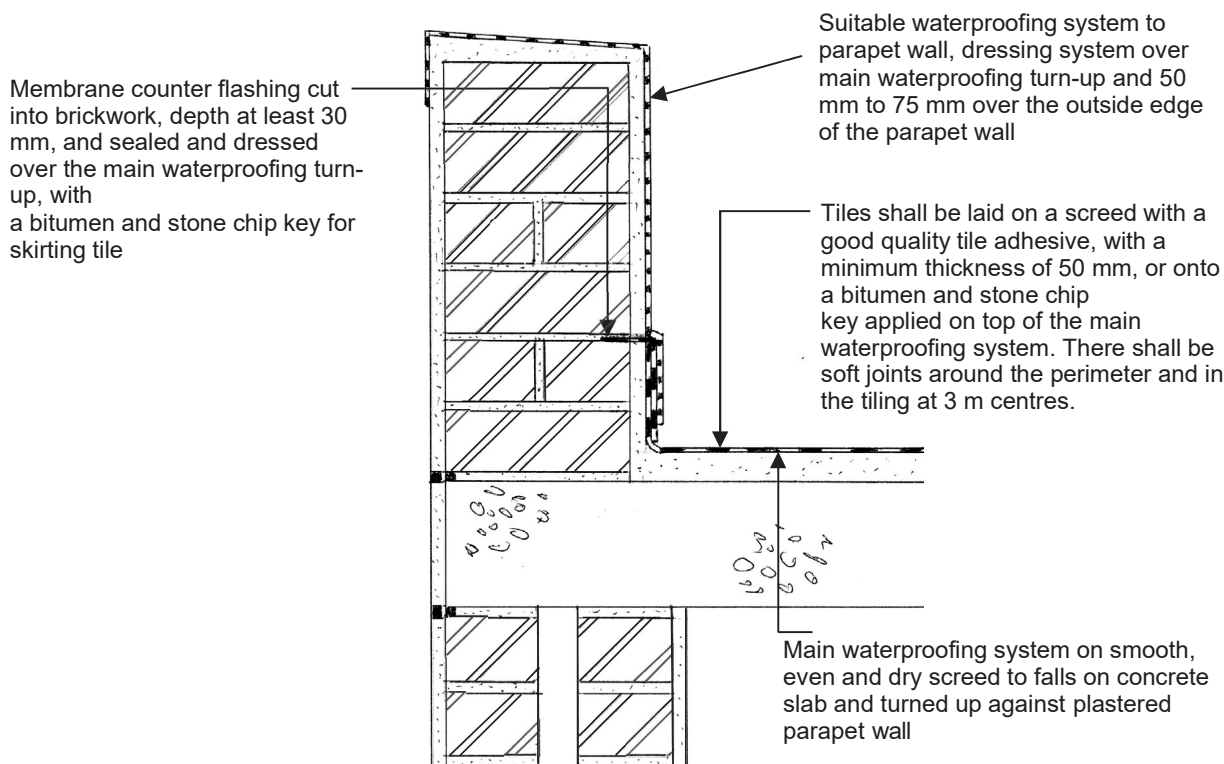
The rate shall cover the cost of the supply of all material, manufacture, cutting, waste, fixing and installation of the joinery items, complete as specified.

The rate for doors shall also cover the cost of the door frames and all accessories, such as hinges, hooks, bolts, locks, latches, etc., and of damp-proof course on both sides and above door frames in cavity walls, as specified. As well as the removal of existing doors where doors are to be replaced.

Annex A
(informative)

Principal waterproofing details

Figures A.1 to A.11 show a few principal waterproofing details and should be adapted to suit the relevant situation. More principal waterproofing details can be obtained from experienced and reputable specialist waterproofing contractors, or waterproofing material manufacturers/suppliers.



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Figure A.1 — Parapet wall waterproofing detail on balcony

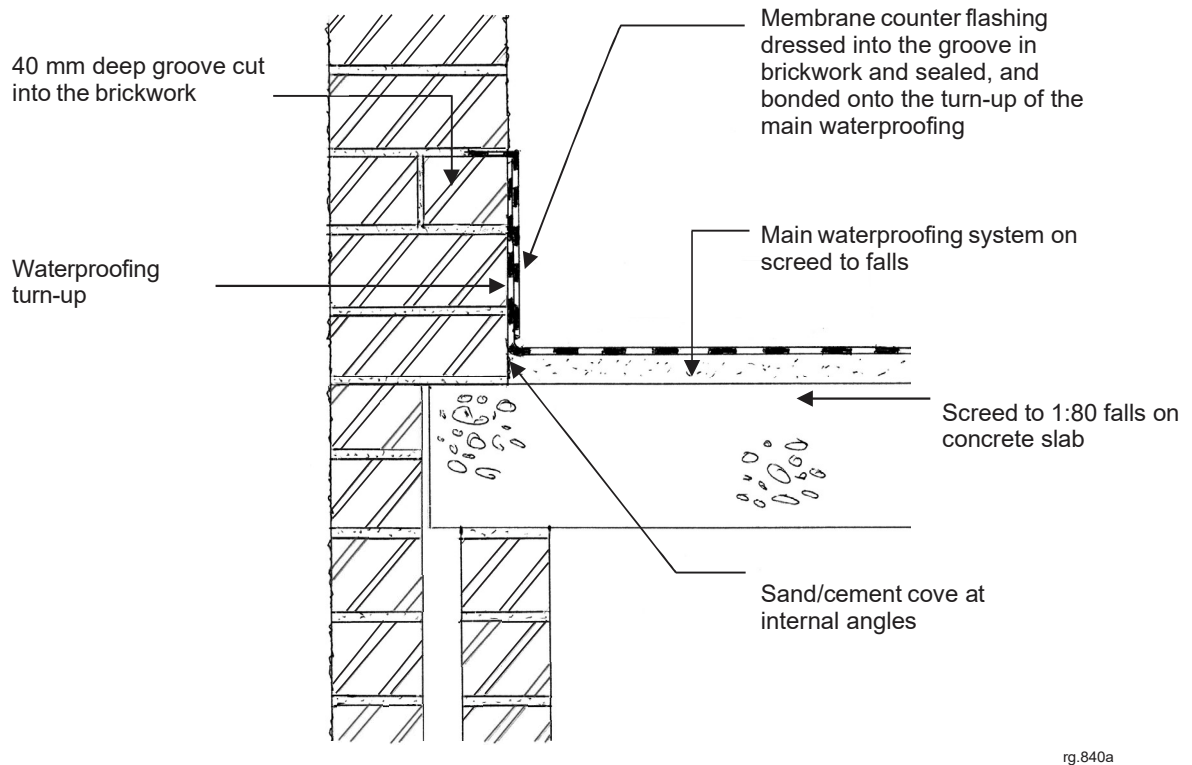


Figure A.2 — Waterproofing turn-up detail against solid brick wall

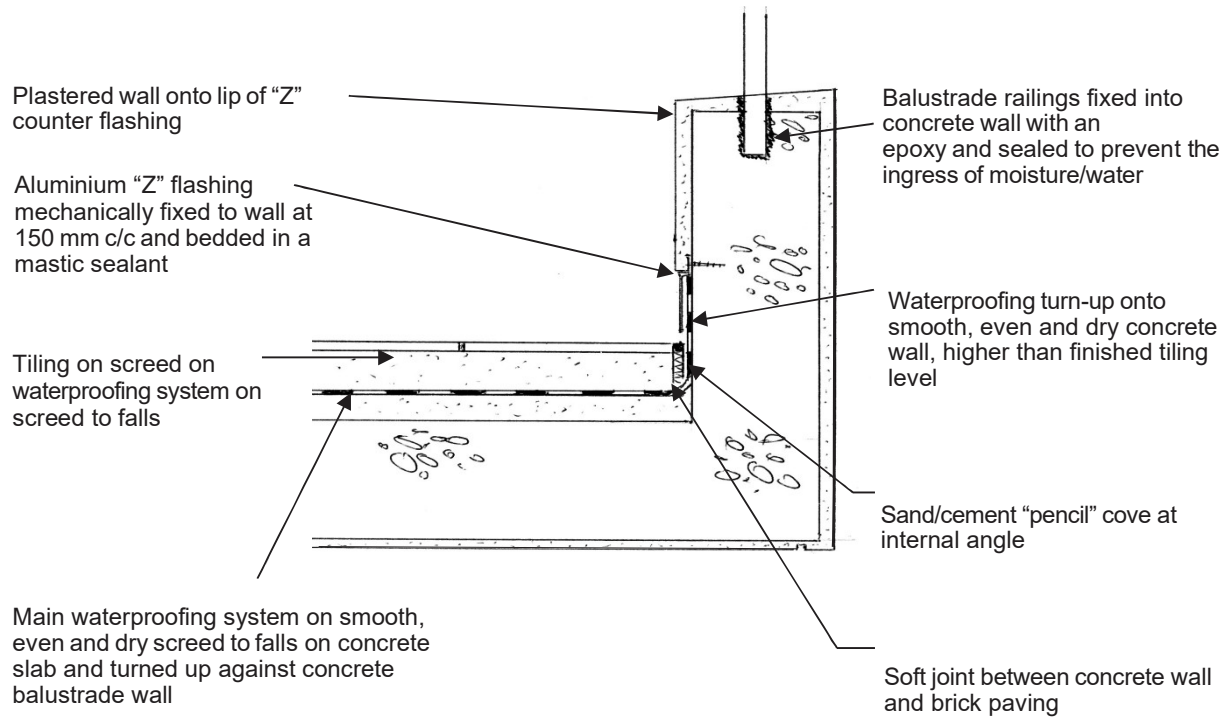


Figure A.3 — Waterproofing turn-up detail at concrete balustrade wall on balcony or against concrete wall

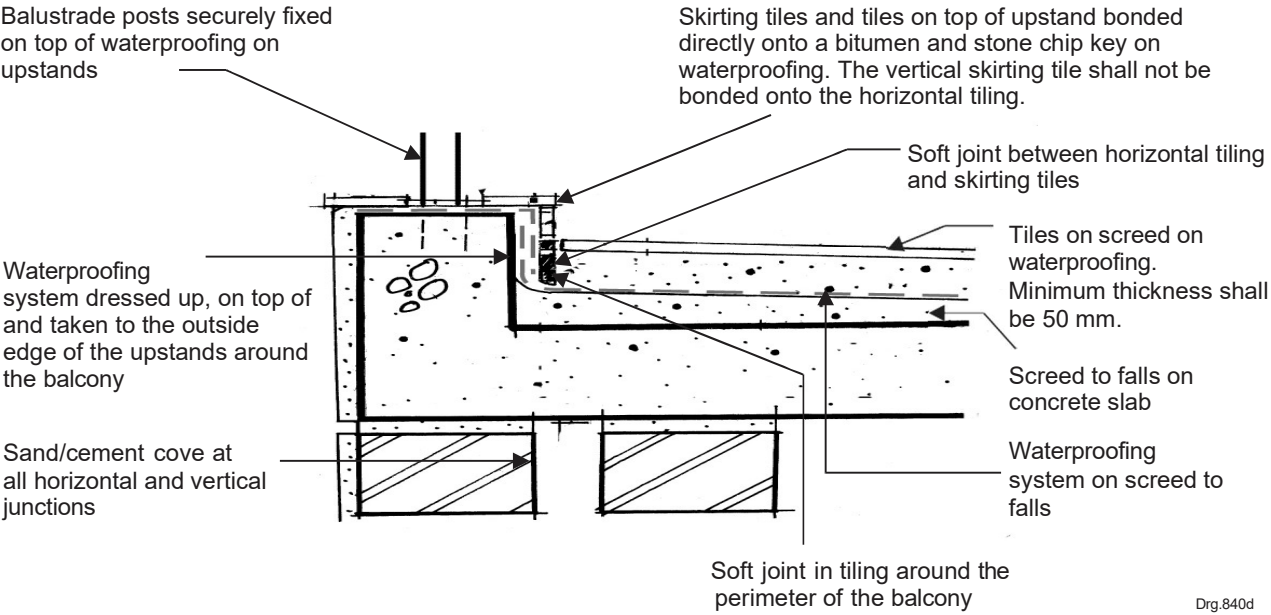


Figure A.4 — Waterproofing detail at perimeter upstand around a balcony

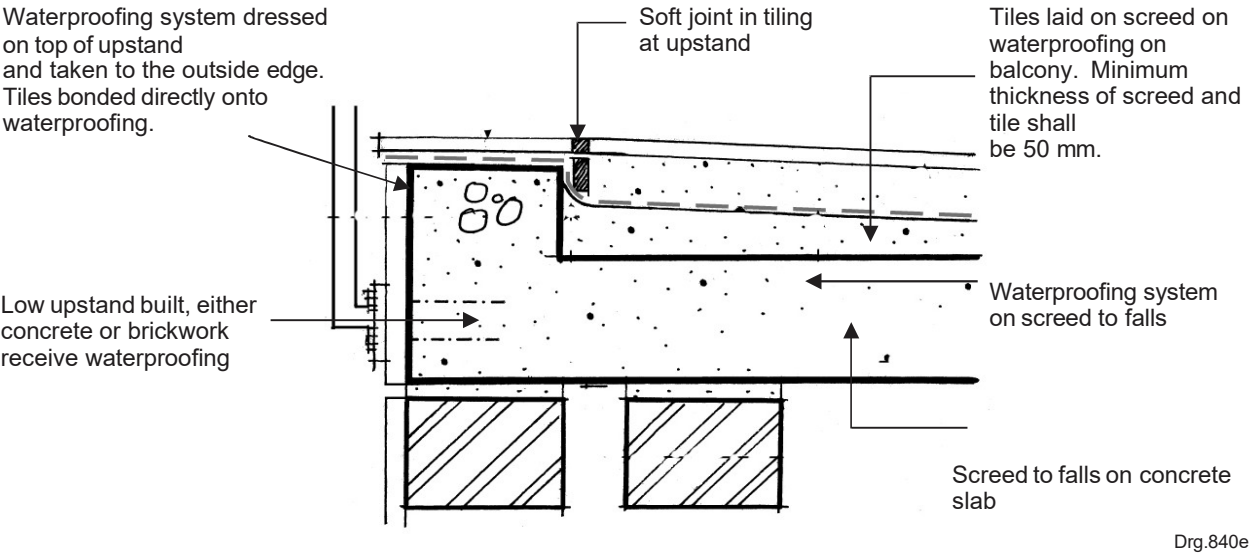


Figure A.5 — Waterproofing detail at low perimeter upstand at the edge of a balcony