

ADSS Hardware Material Technical Evaluation

(Standard 240-1107919540)

ADSS Hardware Score Sheet

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1. ADSS hardware Gatekeepers				
Item	Criteria	Comply	Comments	
1.1	Drawings of assemblies to be provided for ADSS cable in English.			
2. ADSS hardware Desktop Evaluation				
Item	Criteria	Score	Actual	Comments
2.1	Compliance with drawings listed (Annexure N.6)	10		
	Subtotal	10		
	Threshold	7.5		

Annexure N.6 ADSS Hardware Requirements

Item No	Item Description	ADSS Hardware criteria	Score	Comments
a	Tension Assembly	As per NRS 078-2: 2022, section 4.4.5 a	2	Though the standard refers to NRS 078-2: 2005, section 4.4.5 a, the latest is NRS 078-2: 2022, section 4.4.5 a
		Drawing provided		
b	Suspension assembly	As per NRS 078-2: 2022, section 4.4.5 b	2	Though the standard refers to NRS 078-2: 2005, section 4.4.5 b,

				the latest is NRS 078-2: 2022, section 4.4.5 b
		Drawing provided		
c	Aeolian dampers vibration	As per NRS 078-2: 2022, section 4.4.5 c	2	Though the standard refers to NRS 078-2: 2005, section 4.4.5 c, the latest is NRS 078-2: 2022, section 4.4.5 c
		Drawing provided		
d	Clamps	As per NRS 078-2: 2022, section 4.4.5 d	2	Though the standard refers to NRS 078-2: 2005, section 4.4.5 d, the latest is NRS 078-2: 2022, section 4.4.5 d
		Drawing provided		
e	Splicing enclosures	As per NRS 078-2: 2022, section 4.4.5 e	2	Though the standard refers to NRS 078-2: 2005, section 4.4.5 e, the latest is NRS 078-2: 2022, section 4.4.5 e
		Drawing provided		

NRS 078 -2: 2022 Section 4.4.5 Performance requirements

The following general performance requirements for ADSS fittings shall be complied with:

a) tension assemblies;

- 1) tension assemblies shall be of the pre-formed dead-end type;
- 2) excessive stresses, which will affect the fibres of ADSS cable, shall not be applied on the cable; therefore great care shall be taken when hardware for ADSS is being selected;
- 3) the basic dead-end assembly (see figure 4) shall comprise the following items:

- i) a structural reinforcement layer (SRL), wound directly on the cable; (Score: 0.5)
- ii) a dead-end grip wound on the SRL; (Score: 0.5)
- iii) the proper set of links; and (Score: 0.5)
- iv) thimble clevis. (Score: 0.5)

b) suspension assemblies;

- 1) see annex C, figure 5 for a typical assembly.
- 2) a suspension assembly shall comprise the following items:

- i) a clamp body; (Score: 0.5)
- ii) two halves of neoprene insert of “diabolo” shape; (Score: 0.5)
- iii) single spiral rods of SRL layer, may be omitted for medium spans; and (Score: 0.5)
- iv) the proper set of links to attach to the tower or the structure. (Score: 0.5)

c) aeolian vibration dampers; (Score: 2.0)

Vibration dampers that are capable of damping any aeolian vibration that the ADSS will experience shall be offered. The type, size, mass, quantity and spacing of vibration dampers, on a span by span basis, shall be selected to limit the aeolian vibration bending amplitude so that the safe bending amplitude, as prescribed by the ADSS manufacturer, is not exceeded.

d) clamps; (Score: 2.0)

- 1) The design of these clamps shall be such that no excessive stresses, which can affect the performance of the ADSS under any circumstances, will be induced. Down-lead clamps will only be used on structures where joints are made.
- 2) Figures 6(a) and 6(b) show typical clamps for securing the ADSS cable to the structure.

e) splicing enclosures (joint boxes); (Score: 2.0)

Splicing enclosures (joint boxes) shall be subject to the customer’s approval. All construction details and ingress protection (IP) ratings of the proposed units shall be provided. The splicing enclosures, if metallic, shall be supplied with tower earth bonding fixtures. They shall facilitate fibre organization and splicing requirements.

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