## FORMAT B.1

Format for Technical Pre-Bid Queries
Tender No TPSODL/OT/2024-25/002

Rate Contract for Supply of Collapsible FRP Ladder at PAN TPSODL M/s ------Package Name Bidder :

Note:

Sr. No.	TPSODL Technical Document. Please specify Document No /	Description as per Bid Document	Remarks - Query / Clarification	TPSODL Response
1	Clause No / Page No	3	4	5
1	Clause no. 2, Page number 26	APPLICABLE STANDARDS The equipment covered by this specification shall unless otherwise stated, be designed, manufactured and tested in accordance with the latest editions of the following Indian, International standards and shall conforms to the regulations of the local authorities: Compliance to Covered IS-12709: Glass fiber reinforced plastics (grp) pipes, joints and fittings for use for potable water supply IEC 60060: High-voltage test techniques - Part 1: General definitions and test requirements IEC60855: Live working - Insulating foam-filled tubes and solid rods - Part 1: Tubes and rods of a circular cross-section IS: 10192-1982: Synthetic resin bonded glass fiber (SRBGF) sheets for electrical purposes IS: 1998: Methods of test for thermosetting synthetic resin bonded laminated sheets IS: 13410 Glass reinforced polyester sheet molding compounds (SMC).	The standrads which are mentioned in the bid documents are type tests for FRP sections, Kindly suggest applicable IS,EN,ANSI standard for the Ladder safety.	Mentioned all standards are applicable for FRP material. You may also adopt following standards for FRP telescopic ladder. EN-131-6, ASTM D635, ANSI14.5
2	Cluase no. 3, Page number 26	Wind velocity: 300 km/hr, 200 km/hr and 160 km/hr. environmentally, some of the regions, where the work will take place includes coastal areas, subject to high relative humidity, which can give rise to condensation. Onshore winds will frequently be salt laden. On occasions, the combination of salt and condensation may create pollution conditions for outdoor insulators. Some places are in heavily industrial polluted areas. Therefore, Outdoor material and equipment shall be designed and protected for use in exposed, heavily polluted, salty, corrosive and humid coastal atmosphere  The design of equipment and accessories shall be suitable to withstand seismic forces corresponding to an acceleration of 0.1 g	Can you please suggets the applicable standard for the wind velocity?	Mentioned Climatic condition is meant for TPSODL juridiction area. Kindly refer to relevant indian standard for applicable wind velocity calculation for FRP telescopic ladder
3	Clause no. 4, Page number 27	Step distance : 13 inches, 5. Daimeter of Top FRP, 6. Distance between FRP pole, 16. Capacity/Load test	The specifications are not matching with any of the IS, EN, ANSI ladder standards as the only applicable standard of telescopic ladder is EN131, which has declared that telescopic ladders are not fit for use. Link: https://ladderassociation.org.uk/wp-content/uploads/2023/04/Phase-2-Step-In-Telescopic-Ladder-Surveillance-Survey-Report-Version-1-Revision-0-April-2023.pdf	Attached pdf through link is not acceptable as it is not withdrawn by the EN itself. Specification to be complied.  Mentioned dimension is already tested by user. So specification to be complied for the dimension.  Details of ladder design can be finalized at the time of evlaution by sample verification provided by your end.
4	Clause no. 5a, type test, Page number 27, 28	The following tests shall constitute the type tests and shall be carried out as per relevant IS  Visual Examination  Dimensional Check  Impact Strength  Tensile Strength  Comparative Tracking  Specific Gravity  Water absorption  Compressive Strength  Insulation Resistance  Flammability  Glass content, percent by mass.  Dielectric Strength	Can you please suggets the applicable IS Standards?	Followings are the type test conducted as following standards  1. Visual dimension test: As per TPSODL specification  2. tensile test: ASTM D-638  3. Water gravity test: IS 12709  4. insulation resistance test: IS 1998  5. Flammability test: IS 6746, ASTM D635  6. Class content test: IS 10661  7. Di-electric test: ANSI A14.5  8. Load test: ANSI 14.5
5	Clause no. 5b, type test, Page number 28	Routine & acceptance tests:  Usual Inspection Dimensional check Load test Specific Gravity test Water absorption test Cross Breaking strength Compressive Strength Insulation Resistance Flammability	Are these tests shall be conducted on each and every ladder? Or are they routine type test or lot test?	Rountine test / acceptance test shall be conducted on a sample over a lot. That can be decided at the time of inspection call raise.
6	Clause no. 8, Page 30	Bidder shall have adequate in-house testing facilities for carrying out all routine tests & acceptance tests as per relevant International / Indian standards.	Can you please specify the ladder testing facility, which equipments shall be there for all tests?	Routine/acceptance test are listed. Accordingly manufacturer should arrange the equipment required as per the test.