

Lateral Collapsible Textile Structure with Fire Retardant

Technology in Brief

The proposed system comprises of collapsible steel frames equipped with hinges, allowing for easy deployment. The provided wheels in every frame support the folding mechanism and made the system to unfold in few minutes. The external covering consists of two and three layers in which the external layer is water resistant and internal layer is treated with fire retardant. The top corner of structure connected by steel angles to provide stability of the structure. The bottom most nodal point consists of plate with holes provision for foundation connection. Each unit consists of 180 sq ft. area and is intended for modular expansion in both longitudinal directions. In a folded state, the structure executes a compact width of 0.3 m and its installation is facilitated by wheel arrangements. It ensures easy transportation to the site by means of any vehicle by changing the wheels in parallel direction.

Salient Features/Advantages

- User friendly installation procedure.
- Completed structure in all aspect.
- Fire retardant coating.
- Collapsible (horizontal) using wheel arrangement.
- Easy to fabricate and install.
- Cost effective and easy to transport



(a) External View



(b) Internal view

Properties & Standards	Lateral collapsible and easily transportable
End Product(s)	Collapsible Structure (complete)
License/Commercialization	Ready for Commercialization
TRL	6
Linkedin Video Link	https://www.linkedin.com/posts/csircbri_csir-cbri-socialinnovation-activity-7334577924643135488-Beg4?utm_source=share&utm_medium=member_desktop&rcm=ACoAAE1ijyABshTzQUwK7Dj8mksi4yko5dqW6LA
Youtube Video Link	https://www.youtube.com/watch?v=GxOOqb8eFvQ&pp=0gcJCa0JAYcqlYzv

