



## Name of the Technology: **Acoustical Lightweight Interior Dry Wall Panel for High Sound Insulation**

**Summary:** The acoustical characteristics of partition panel in theory are capable for providing extremely better values of sound transmission loss but these better values are not usually obtained in practice due to the presence of necessary sound bridges which often form a direct mechanical connection between the two panels that constitute the partition panel. It will be possible to obtain transmission loss to provide an sound transmission class (STC) rating of > 55 (by minimizing sound bridges and providing adequate cavity absorption), adequately high STC for an inter dwelling partition panel which is approx. 10 rating points higher than the standard staggered stud panel with little increase in total mass.

**Applications:** Used for internal walls, and ceiling in hotels, restaurants, factory, shopping malls, cinemas, theatres, hospitals, airports, and school, universities constructions, residential and commercial buildings, PVR halls and multiples.

Wide range of users like architects, noise control engineers builders, regulators, manufactures and consumers

### **Advantages:** □

- ✓ Low cost, lightweight , dry construction, high STC (> 55) rating panel, easy to commission , time saving, overall safety and energy conserving
- ✓ The popularity of Gypsum Board comes from many reasons but mostly because it can effectively suit to the modern construction design, remarkable aesthetic appeal, quick and economic installation and safety
- ✓ Many advantages over prevailing conventional practices of construction, specially as a brick wall substitute and other partition panels (Siporex Panel, Aerocon Panel, etc.)

### **Choose the Readiness level of the Technology:**

Idea	Concept Definition	Proof of Concept	Prototype	Lab Validation	Technology Development	Technology Demonstration	Technology Integrated	Market Launch

**Related Patents:** NIL,

**Year of Introduction:** 2016



**Broad Area/Category:** Building Acoustics, Architectural Acoustics

**User Industries:** Building Industries, Glass Manufacturers, Gypsum Industries etc.

**For further details please contact:**

Head, Industrial Liaison Group (ILG)

Room No. 46-A, Main Building

CSIR-National Physical Laboratory

Dr. K.S. Krishnan Marg

New Delhi 110012, INDIA.

**Email: [headilg@nplindia.org](mailto:headilg@nplindia.org)**

Tel: +91-11-4560-8350/8247/9385

Fax: +91-11-4560-9310