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PM2 Building System Sdn. Bhd.
No. 19, Jalan SB Indah 1/18
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Attention: Mr. Steven Chiew **Fax: +603 8941 0817**

PM2 BUILDING SYSTEM - WALL SOUND INSULATION PERFORMANCE ASSESSMENT – (REVISION 1)

We have reviewed the PM2 Single Panel illustration and description provided by PM2 Building System Sdn. Bhd. and our findings are as follows. This Revision 1 report shall supersede the earlier report on the same subject.

1.0 The PM2 Single Panel/System Description

The PM2 single panel is made up of a spatial steel trestle enclosing a foam polystyrene plate, it is finished on site with concrete spray.

The wall panel is constructed from the following

- Structural Plaster Layer 1, Layer 2 and choice of finishing, consisting of 35.0mm thick Gred 30 Concrete (2500kg/m^3) – Sprayed On a 75mm square 2.5mm dia. Galvanised wire mesh netting, (Side A)
- 80mm thick Corrugated Fire Retardant Expanded Polystyrene
- Structural Plaster Layer 1, Layer 2 and choice of finishing, consisting of 35.0mm thick Gred 30 Concrete (2500kg/m^3) – Sprayed On a 75mm square 2.5mm dia. Galvanised wire mesh netting, (Side B)

The wire mesh for both sides, layer A & B are Electrowelded/Spot-welded together at the factory using 3.0mm dia. Galvanised steel tie rods. Total overall thickness of the panel is 150mm.

Analysis shows the panel having a surface mass of 177kg/m^2, where the panel components are the 35mm thick concrete, an infill of fire retardant expanded polystyrene, and another 35mm thick concrete. The surface mass has not included the structural wire mesh and tie rods system.

This panel construction is describes in Appendix A, attached.

2.0 Acoustic Performance Estimates

Analysis shows the current system achieving an estimated sound reduction performance of (Sound Transmission Class) **STC 46, should the system be tested** in an independent acoustic laboratory, under the guidelines of an approved international test standard.

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3.0 Additional Requirements To Ensure The PM2 Single Wall STC46 Is Achieved

1. System must come installed with no perimeter gaps between the panel and the wall, soffit and floor.

2. Any mechanical and electrical elements penetrating the wall panel shall adhere to sealing methods as stipulated within the panel's manufacturer's installation guidelines.

We trust the above is sufficient for your requirements at this time. Should any party have any queries or require any further comments, please do contact us.

Yours faithfully,
PRAKHUN ACOUSTICS SDN. BHD.

NAI BOONLERT SARARAKSH