



adding 'ingenuity' to building projects

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Providing the services of:

Chartered Professional Engineers

Ref: Metalcraft / MetecnoPanel MetecnoSpan Grp No. 2013-03-19.doc

20 March, 2013

METALCRAFT Insulated Panel Systems
PO Box 43-154
MANGERE CENTRAL
AUCKLAND

For the attention of: Frances Charles

Dear Frances Charles

**Re: Group Numbers for METALCRAFT Insulated Panel Products
MetecnoPanel PIR & MetecnoSpan PIR – Group Number 2-S**

As requested, we have determined the appropriate Group Numbers for these panel products when used as lining materials. These Group Numbers are used to demonstrate compliance with the Surface Finish requirement for walls and ceilings of the New Zealand Building Code Clauses C1 – C6 Protection from Fire.

1.0 BACKGROUND

The method of establishing the Group Numbers is specified in the Verification Method C/VM2 Appendix A and is determined from the results of tests on the panels carried out to ISO 9705.

Metalcraft Insulated Panel Systems have made available CSIRO assessment certificates based on tests carried out by the CSIRO on PIR wall panels with different jointing materials. The CSIRO test results are contained in reports CMSE-(C)-2008-075 and CMSE-(C)-2008-076.

The wall panels tested were MetecnoPanel Polyisocyanurate (PIR) panels with Colorbond 0.5mm facing skins with 37 kg/m³ PIR cores.

MetecnoSpan roof panels are similar panels manufactured with a trapezoidal profile ribbed external facing surface. For the purposes of determining the Group Numbers, the design of the roof panel is consistent with the design of the PIR wall panels used in the CSIRO tests. The design differs only on the unexposed face of the roof panels where the panel joint is achieved with an overlap at the trapezoidal profile. It is therefore considered that the MetecnoSpan PIR roof panels, if assembled and tested as the PIR wall panels were in the CSIRO tests, would achieve the same Group Number as achieved by the tested EPS wall panels.

The performance criteria used for the purpose of determining the Group Number is the time to reach 1 MW of heat release. The average smoke production rate over the 0 – 20 minute period is also used for the S suffix Group Number designation.

2.0 CONCLUSION

- **Group Number 2-S** applies to MetecnoPanel PIR and MetecnoSpan PIR panel construction when assembled using the Metalcraft Insulated Panel Systems Metecno panel installation instructions.



- Engineering Reports (Civil, Structural & Fire)
- Building Designs
- Structural Draughting (CAD)
- Project Management

We trust you find these points in order, but should you have any queries on any aspect please do not hesitate to call.

Yours sincerely
Redco NZ Ltd



Graham Rundle
Principal

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