

# Opus Testing Results



Testing completed in 2003

System PT300 Product Testing

Client Putz Technik

Instruction : To test System PT300 Plaster Mix to confirm overseas Results

## Test Methods

Air entrainment : NZS 3112:1986 Part 1 Test 9

Density : NZS 3112:1986 Part 3 Test 5

Flexural Strength : NZS 3112:1986 Part 2 Test 7

Bond Strength : In House Method

Tension tests were carried out using a Shimadzu REH100 TV universal testing machine complying with grade 1 of NZS 6507:1986 to apply the loads.

A loading rod was screwed into a M10 adapter attached to a nut welded to a 44.5mm diameter steel plate that had been attached using adhesive onto the prepared surface.

The loading rod passed through the lower crosshead of the machine and was gripped in the upper crosshead jaws.

The load was then applied until failure occurred.

Compressive Strength : NZS 3112:1986 Part 2 Test 8

Direct Tensile Test : ASTM C190

## Results

Samples were mixed at a water/plaster ratio of 0.29 following the method as described in ASTM C 305-82

- 1) Air Entrainment 16%
- 2) Plaster Density 2010 Kg/m<sup>3</sup>
- 3) Flexural Strength 5.6Mpa
- 4) Bond strength

Polystyrene	Failure of the polystyrene in all cases
Concrete	1.1Mpa (Concrete surface failure)
- 5) Compressive strength 13.5Mpa
- 6) Direct Tensile test 2.2 Mpa

### General Observations :

From the testing carried out to date it appears that the Putz Technik System 300 is comparable with other systems currently in use. Further testing to determine the cone calorimeter value for fire performance and wind face load testing may need to be carried out.

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