

FC10453-001-TO

Technical Opinion Summary



This is to certify that the specimen described below has been examined by BRANZ on behalf of the sponsor.

Sponsor

3M Australia Pty Ltd
Building A, 1 Rivett Road
North Ryde,
NSW, 2113
Australia

Reference BRANZ Reports FC10453-001-TO

Referenced Standard AS1530.4:2014 and AS 4072.1-2005

Specimen Name: 3M TUCK-IN WRAP STRIP penetration seals for PVC U pipes

Specimen Description: Intumescent material formed into strips 64 mm wide x 5 mm thick with a length to suit the pipe diameter. The strips are wrapped around the pipe in layers as required for the pipe.

The walls may be either masonry walls at least 120 mm thick or plasterboard lined walls at least 100 mm thick with at least two layers of 12.5 mm thick fire rated plasterboard and at least 50 mm deep steel studs. The concrete floors are 74 mm to 150 mm thick.

Orientation: Exposure from either side for walls or the underside of floor slabs.

The assessed results were as follows:

Table 1 and Table 2 give the FRL for walls and floors respectively.

Issued by

A blue ink signature of E. Soja.

E. Soja
Senior Fire Testing Engineer

Reviewed by

A blue ink signature of M. E. Godkin.

M. E. Godkin
Senior Fire Safety Engineer

*Regulatory authorities are advised to examine
test reports before approving any product.*

Issue Date
22 November 2018

Expiry Date
22 November 2023

Table 1: PVC-U FRL summary in a 100 mm thick plasterboard or 120 mm thick concrete wall system

Penetration number	Pipe diameter and wall thickness	No. of Wraps	FRL
A1	PVC-U 50 x 1.8 mm	1	-/120/120
A2	PVC-U 50 x 3.7 mm	1	-/120/120
A3	PVC-U 110 x 3.2 mm	2	-/120/120
A4	PVC-U 110 x 5.3 mm	2	-/120/120
A5	PVC-U 110 x 3.2 mm	1	-/120/90
A6	PVC-U 110 x 5.3 mm	1	-/60/60

Table 2: PVC-U FRL summary in concrete floor slab

Number	Pipe Size	Annular Gap (mm)	Number of Wrap Strips	Fire Resistance (min) for Minimum Slab Effective Thickness (mm)				
				150	120	100	80	74
C1	160 x 9.5 mm	21	2	180	120	90	60	30
C2	114 x 5 mm	19	2	180	120	90	60	30
C3	160 x 3.2 mm	21	2	180	120	90	60	30
C4	114 x 5 mm	19	1	180	120	90	60	30
C5	114 x 6 mm	19	2	180	120	90	60	30
C6	114 x 5 mm	9	1	180	120	90	60	30
C7	50 x 2.4 mm	21	1	180	120	90	60	30
C8	50 x 2.4 mm	11	1	180	120	90	60	30
D1	114 x 4.5 mm	9	2	180	120	90	60	30
D2	160 x 3.2 mm	11	2	180	120	90	60	30
D3	114 x 6 mm	9	2	180	120	90	60	30
D4	160 x 6.5 mm	11	2	180	120	90	60	30
D5	110 x 6.6 mm	11	1	120	120	90	60	30
D6	110 x 6.6 mm	21	2	180	120	90	60	30
D7	50 x 3.7 mm	21	1	180	120	90	60	30
D8	50 x 3.7 mm	11	1	180	120	90	60	30

The FRL, derived from the table above is expressed as -/180/180, -/120/120, etc.