

# Technical Supplement

Australia May 2022

## One Way Fire Rated Wall Solutions

### Introduction

This Technical Supplement provides an overview of the Hardie™ One Way Fire Rated Wall solutions for the use by architects, specifiers and builders involved in the specification of external fire rated walls for residential dwellings.

The specifier or other party responsible for the project must ensure that the details in this technical supplement are appropriate for the intended application and additional detailing is performed

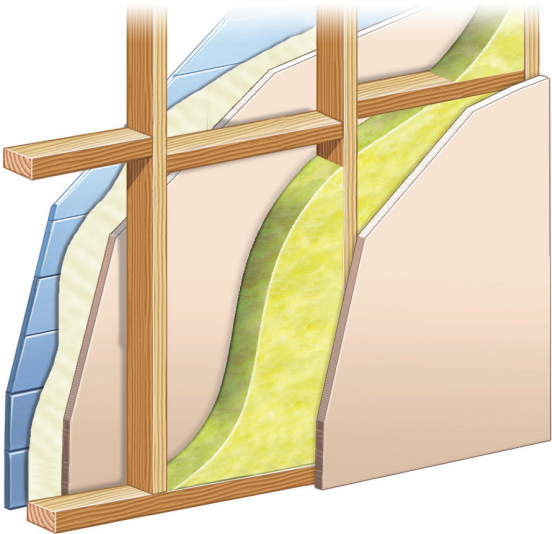
This Technical Supplement must be read in conjunction with the current Hardie™ Fire and Acoustically Rated Walls Application Guide and relevant product technical literature. This literature provides details of framing installation, layout of sheeting, fasteners, placement of acoustic infill, control joints, corners, decorative finishes, service penetrations and more.

For further information, please visit [www.jameshardie.com.au](http://www.jameshardie.com.au) or Ask James Hardie™ on 13 11 03.

### IMPORTANT NOTES

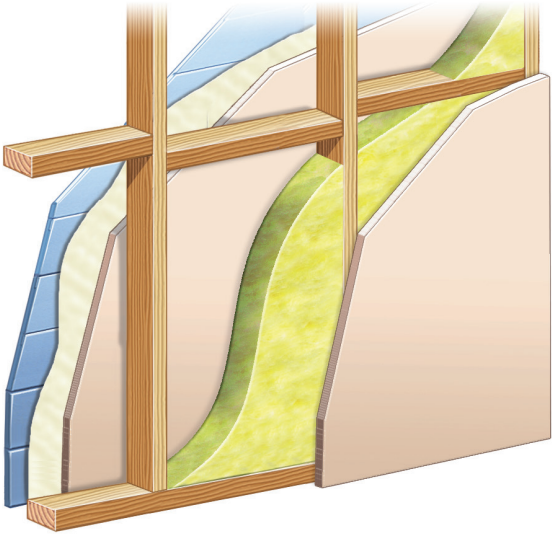
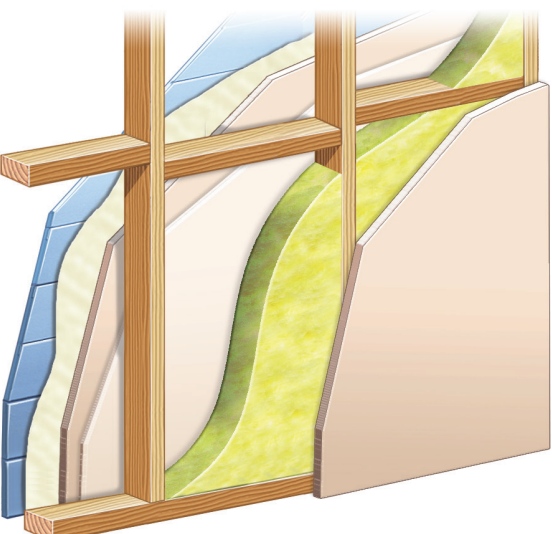
1. The information in this document is given as a guide only and must be read in conjunction with the respective current James Hardie installation guide, relevant NCC requirements and any other relevant literature. This is not a standalone document for the installation of James Hardie products.
2. For specification, installation and warranty terms of James Hardie™ products, ensure that you have the current technical information and guides. If in doubt, or you need more information, visit [www.jameshardie.com.au](http://www.jameshardie.com.au) or Ask James Hardie™ on 13 11 03.

TABLE 1 - ONE WAY FIRE RATED WALL SOLUTIONS:

One Way Fire Rated Wall System Option 1 (JH-218)	
60/60/60 FRL	System Requirements
	<p><b>External Face of wall</b></p> <ul style="list-style-type: none"><li>• 1 Layer of Hardie™ Fibre Cement minimum 6mm thick</li><li>• Hardie™ Weather Barrier or equivalent</li><li>• 16 mm fire and water resistant plasterboard</li></ul> <p><b>Internal Face of Wall</b></p> <ul style="list-style-type: none"><li>• 1 Layer of standard 10 mm plasterboard lining</li></ul> <p><b>Wall Frame</b> Minimum 90x45mm seasoned timber up to 2.7m high OR minimum 92x35x1.15 steel studs with 1.350mm horizontal noggings up to 3m high.</p> <p><b>Cavity Infill</b></p> <ul style="list-style-type: none"><li>• Fibre glass 14 - 18 kg/m3 (minimum)</li></ul> <p>Acoustic Prediction: <math>R_w = 45</math></p> <p>IGNIS Advisory Notes No. - <b>IGNS-9271-26L</b></p> <p>NOTE When fixing the Hardie™ external cladding to the wall frame, the length of fasteners must be increased to account for the plasterboard thickness, see Table 2 for specific sizes.</p>

NOTE Although figures show timber frames, light gauge steel frames may also be used.

**TABLE 1 - ONE WAY FIRE RATED WALL SOLUTIONS:**

One Way Fire Rated Wall System Option 2 (JH-219)	
60/60/60 FRL	System Requirements
	<p><b>External Face of wall</b></p> <ul style="list-style-type: none"> <li>• 1 Layer of Hardie™ Fibre Cement minimum 6mm thick</li> <li>• Hardie™ Weather Barrier or equivalent</li> <li>• 13 mm fire and water resistant plasterboard</li> </ul> <p><b>Internal Face of Wall</b></p> <ul style="list-style-type: none"> <li>• 1 Layer of 13 mm fire and water resistant plasterboard lining</li> </ul> <p><b>Wall Frame</b> Minimum 90x45mm seasoned timber up to 2.7m high OR minimum 92x35x1.15 steel studs with 1.350mm horizontal noggings up to 3m high.</p> <p><b>Cavity Infill</b></p> <ul style="list-style-type: none"> <li>• Fibre glass 14 - 18 kg/m3 (minimum)</li> </ul> <p>Acoustic Prediction: <math>R_w = 45</math></p> <p>IGNIS Advisory Notes No. - <b>IGNS-9271-27L</b></p> <p>NOTE When fixing the Hardie™ external cladding to the wall frame, the length of fasteners must be increased to account for the plasterboard thickness, see Table 2 for specific sizes.</p>
One Way Fire Rated Wall System (JH-21.10)	
90/90/90 FRL	System Requirements
	<p><b>External Face of wall</b></p> <ul style="list-style-type: none"> <li>• 1 Layer of Hardie™ Fibre Cement minimum 6mm thick</li> <li>• Hardie™ Weather Barrier or equivalent</li> <li>• 16 mm fire and water resistant plasterboard</li> <li>• Hardie™ Fibre Cement minimum 6mm thick</li> </ul> <p><b>Internal Face of Wall</b></p> <ul style="list-style-type: none"> <li>• 1 Layer of 16 mm fire and water resistant plasterboard lining</li> </ul> <p><b>Wall Frame</b> Minimum 90x45mm seasoned timber up to 2.7m high OR minimum 92x35x1.15 steel studs with 1.350mm horizontal noggings up to 3m high.</p> <p><b>Cavity Infill</b></p> <ul style="list-style-type: none"> <li>• Fibre glass 14 - 18 kg/m3 (minimum)</li> </ul> <p>Acoustic Prediction: <math>R_w = 47</math></p> <p>IGNIS Advisory Notes No. - <b>IGNS-9271-28L</b></p> <p>NOTE When fixing the Hardie™ external cladding to the wall frame, the length of fasteners must be increased to account for the plasterboard thickness, see Table 2 for specific sizes.</p>