

TWrap insulations systems to supersede FyreWrap 450mm as of June 1st 2020

On behalf of Trafalgar Fire, it is my pleasure to officially announce the release of our new TWrap service penetration insulation systems, which feature improved/reduced installation requirements, tailored wrap lengths, and a greater range of approvals for more applications. Most importantly, the new TWrap systems are tested in accordance with AS1530.4-2014 and ready for the National Construction Code (NCC) 2022 requirements.

It is important to note that existing FyreWrap 450mm installations remain compliant under FCO 3024a as long as they were installed on or before the 31st of May 2020. Under our new TWrap approvals, FyreWrap may be substituted for TWrap to assist in a smoother transition period for sites already using the FyreWrap material, however the updated wrap lengths of the TWrap system will apply.

The new TWrap systems feature:

- Reduced thickness, at 25mm thick.
- Off-the-shelf steel cable ties.
- Reduced wrap lengths in a lot of applications (including some new wrap-free systems).
- Removed the need seal the base of the wrap to the fire barrier, resulting in significant labour and material reductions on site.
- Fully encapsulated and much easier to wrap.

Our growing library of testing has shown that the length of TWrap needed to reduce the heat rise through a fire barrier is very specific to each application, including the wall or floor element as well as the service size and type. As a result of this, our TWrap length specifications are not a simple uniform 'one size fits all' rule like its predecessor.

For most applications, we have found the following:

- Smaller cable penetrations can be wrap-free or treated with 300mm, with 450mm length covering larger cable trays as needed.
- Smaller metal pipes (copper under DN50 and steel under NB100) will require 300mm to 450mm lengths of TWrap to achieve insulation performance of 2 hours.
- Larger metal pipes require longer lengths of wrap than previously approved

Trafalgar Fire are committed to communicating this change of specification to the installers, builders, architects and certifiers and we encourage them to review the new information available in the TWrap Product manual, and associated parent penetration system product manuals.

We recommend that our customers adopt the new wrap lengths immediately on site to ensure a smooth transition to the new reports.

To provide some background, the insulation rating of an FRL measures the time it takes for a building element to increase in temperature past 180 degrees on the non-fire side of a fire barrier, and is measured through fire testing to AS1530.4 through a series of thermocouples placed on the surfaces of the test specimen. When the National Construction Code or NCC (formerly known as BCA) changed over 10 years ago, it included a reduction to the waivers given for the insulation criteria for service penetrations, specifically around cable services but also metal pipes.

As an effective solution to a complex thermal problem Trafalgar Fire introduced an NCC compliant insulation system, using 38mm FyreWrap insulation blanket approved through report FCO 3024a with a uniform '450mm' wrap length.

TWrap will be available in 300mm wide rolls from June 1st 2020, and the FyreWrap rolls will still be readily available for the foreseeable future as we look to eventually bring in a TWrap 450mm roll (due to COVID-19 disruptions our plans to do this sooner have been pushed back slightly). Pricing lists will be updated and issued over the next few weeks to our account customers to reflect these new TWrap systems, and any sales enquiries should be directed to sales@tfire.com.au.

If you have any questions on this new and exciting system update, please feel free to contact me at technical@tgroup.com.au.



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