

3M™ Fire Barrier Duct-Wrap 615+ Single Layer System Installation Guide

General Installation techniques

The single layer of 3M™ Fire Barrier Duct Wrap 615+ blanket is wrapped around the perimeter of the duct and is cut to a length to overlap itself not less than 75 mm, this is known as the “circumferential” or “lateral” joint. The interface between adjacent blankets forms the “longitudinal” joint. The minimum overlap required at the longitudinal joints is a minimum 75mm overlap. Aluminium foil tape 3M 425 or FSK tape (3M™ FSK Facing Tape 3320 or equivalent) is used to seal all cut edges of the blanket and any tears in the foil scrim. As an installation aid, the blanket may be temporarily held in place using 3M filament tape. **The 3M™ Fire Barrier Duct Wrap 615+ requires permanent fastening with stainless (or carbon) steel banding, or with rows of weld pins (impaling or cup head style) over the outer layer of Wrap.**

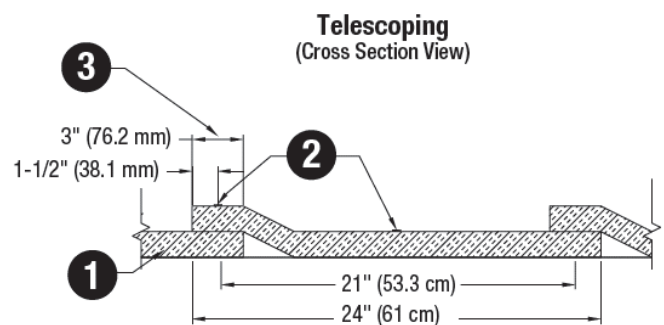
This guide provides the general procedures for installing 3M 615+ Duct Wrap. For more detail, refer to current approvals for Internal & External Exposure at www.3M.com.au/fireprotection.

There are 3 methods for installation of Single layer 3M™ Fire Barrier Duct Wrap 615+ :

Telescoping 75 mm (3”) Overlap Wrap

With the Telescoping Overlap Wrap method, each blanket overlaps one adjacent blanket. Each blanket has one edge initially exposed which is then covered by the edge of the next blanket as shown in Figure 2A.

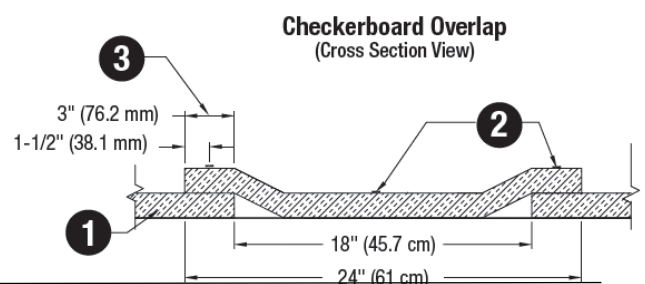
1. Single layer of 3M™ Fire Barrier Duct Wrap 615+
2. Steel banding 1/2" (12.7mm) wide min. typical
3. 3" (75mm) min. longitudinal overlap



Checkerboard 75mm (3”) Overlap Wrap

With the 3" (75mm) Checkerboard Overlap Wrap method, blankets with both edges exposed alternate with blankets with covered edges

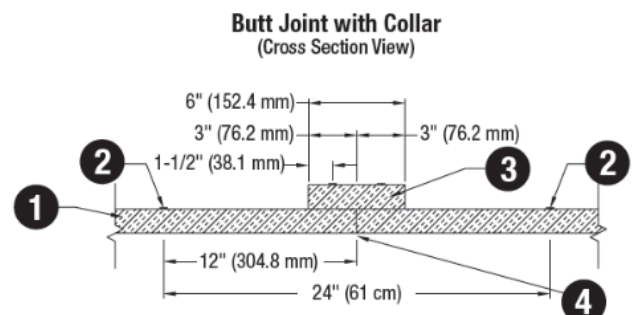
1. Single layer of 3M™ Fire Barrier Duct Wrap 615+
2. Steel banding 1/2" (12.7mm) wide min. typical
3. 3" (75mm) min. longitudinal overlap



Butt Joint with Collar

With the Butt Joint and Collar method, adjacent blankets are butted tightly together and 6" (152.4mm) wide collar of duct wrap is centred over the joint, overlapping each blanket by 3" (75mm) minimum.

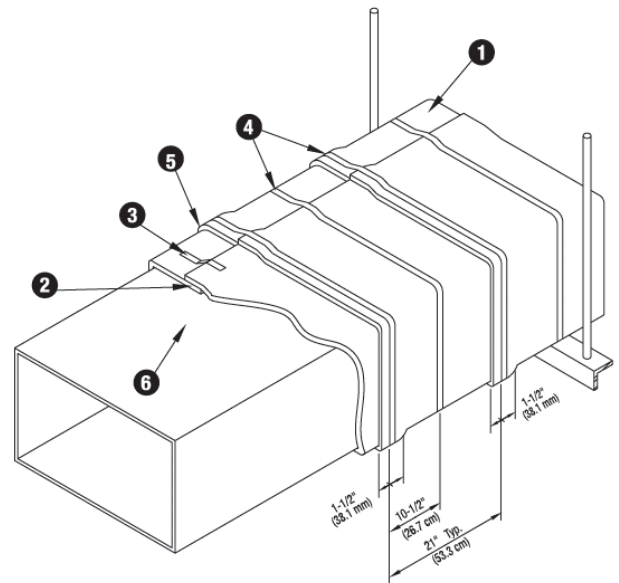
1. Single layer of 3M™ Fire Barrier Duct Wrap 615+
2. Steel banding 1/2" (12.7mm) wide min. typical
3. 6" (152.4mm) min. wide 3M™ Fire Barrier Duct Wrap 615+ Collar
4. Tightly butted joint



Installation techniques - Overview

1. 3M™ Fire Barrier Duct Wrap 615+, 1-layer
2. Perimeter (lateral) joint min. 3" (75mm) overlap
3. 3/4" (19mm) wide filament tape
4. Steel banding 1/2" (12.7mm) wide min. typical for permanent fastening
5. Longitudinal joint min. 3" (75mm) overlap
6. Metallic duct

Note: System integrity is limited by quality of installation. Ducts ≥ 609 mm wide require pinning on the bottom side of horizontal ducts and on a minimum of one of the wider sides of a vertical duct. Vertical ducts > 1200 mm require pinning on all sides.



3M™ Fire Barrier Duct Wrap 615+ Pinning guide

Additional pinning is required to prevent sagging of the duct wrap. Please refer to pinning & banding guidelines in each approval for Internal and External exposure. This guide provides the general procedures for installing 3M 615+ Duct Wrap. For more detail, refer to current approvals for Internal & External Exposure at: www.3M.com.au/fireprotection .

Materials and Equipment

- Minimum 12 gauge copper-coated steel insulation pins used with minimum 63.5mm square galvanized steel or stainless speed clips or 1-1/2" (38.1mm) dia. round or equivalent sized insulated cup-head pins
- Capacitor discharge stud gun Note: Either apply min. 12 gauge copper-coated impaling pins to the bare duct using a capacitor discharge gun or apply min. 12 gauge cup-head pins after the duct wrap is installed.



3M Industrial Adhesives and Tapes Division

3M Australia Ltd
Bldg A, 1 Rivett Road,
North Ryde, NSW 2113
Phone 136 136
Web www.3m.com.au

For further information Call: 136 136

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