

TBA FIREFLY

PASSIVE FIRE PROTECTION

TBA FIREFLY™

PENOWRAP®

INSTALLATION MANUAL

PENOWRAP®
SIZE

10m LONG

300mm WIDE

12mm THICK

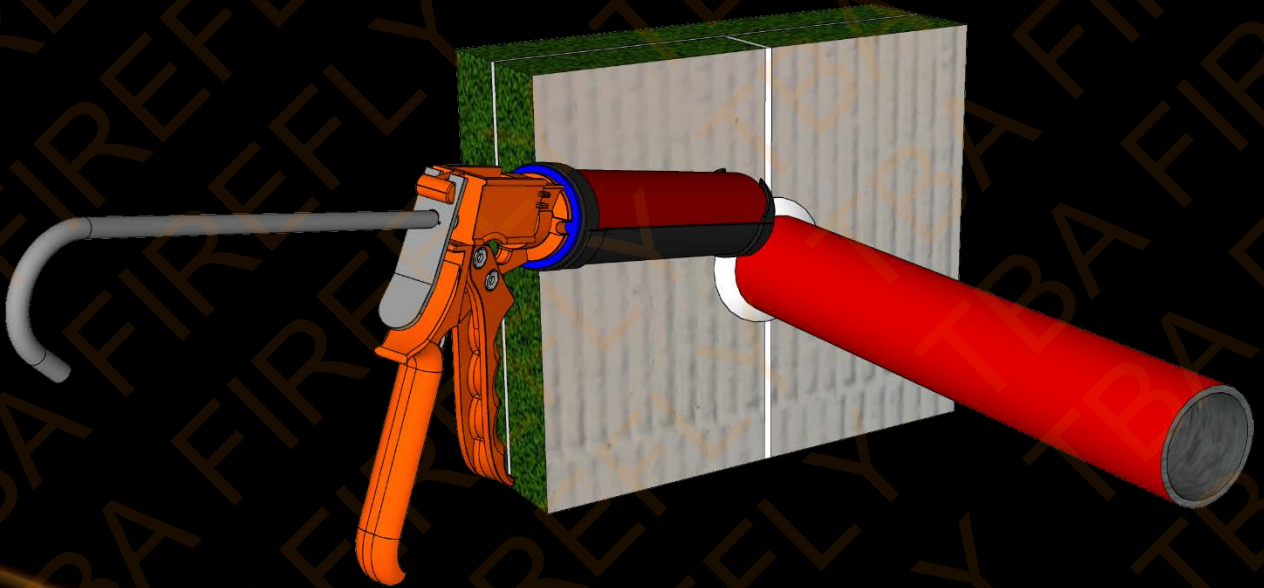


TBAFIREFLY.COM.AU

WRAPPING A SHAPE WITHOUT A CAVITY

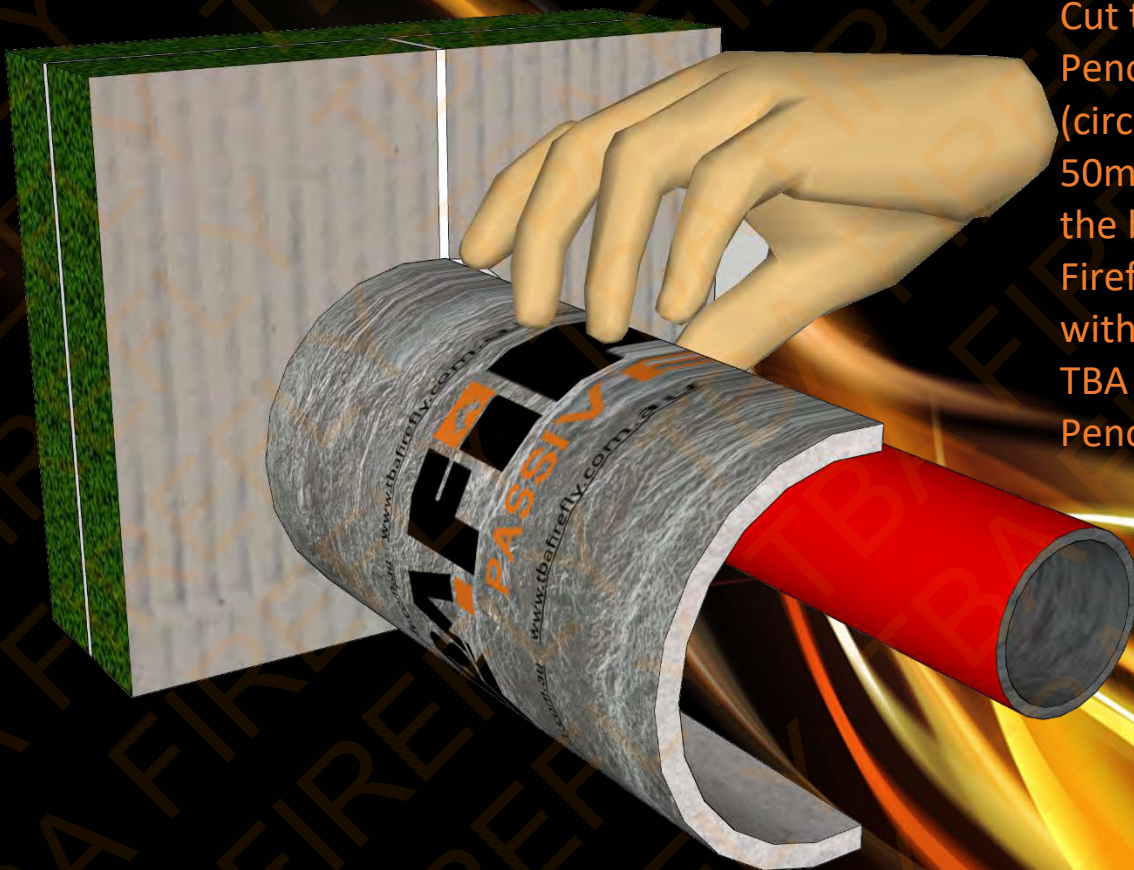
STEP 1:

Run a 6mm bead of TBA Firefly™ Intumastic around the junction between the service penetration and the substrate or the 2 layers of TBA Firefly™ Intubatt®.



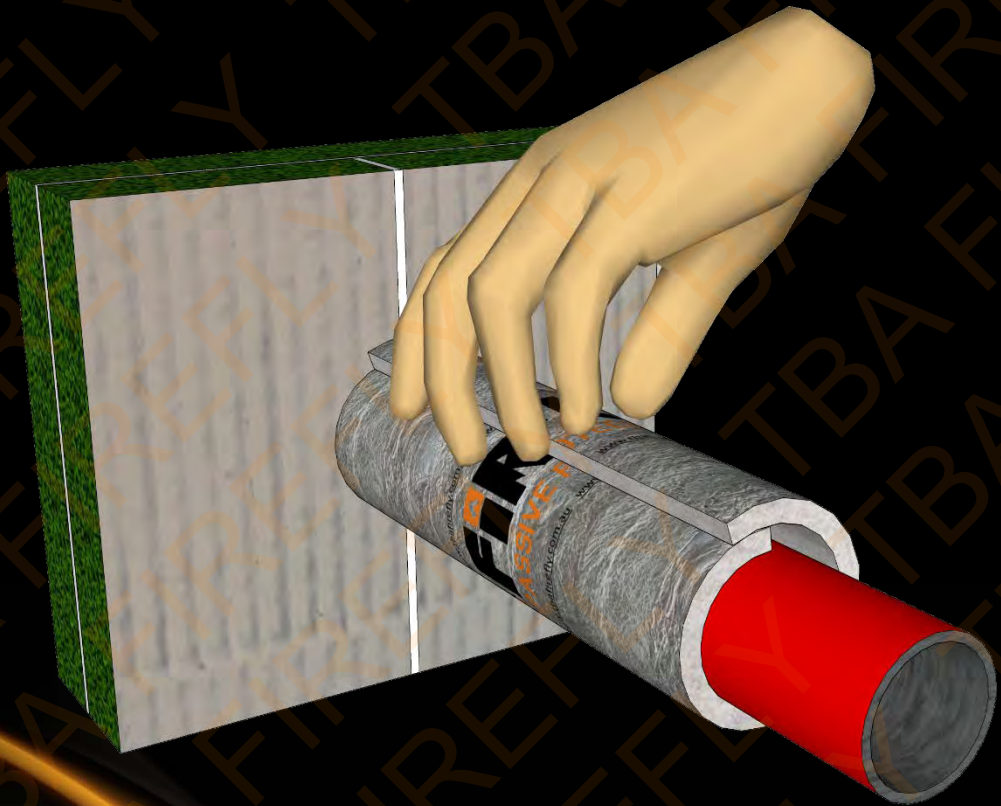
STEP 2:

Cut the TBA Firefly™ Penowrap® to length (circumference plus 50mm). Then squidge the bead of TBA Firefly™ Intumastic with the end of the TBA Firefly™ Penowrap®.



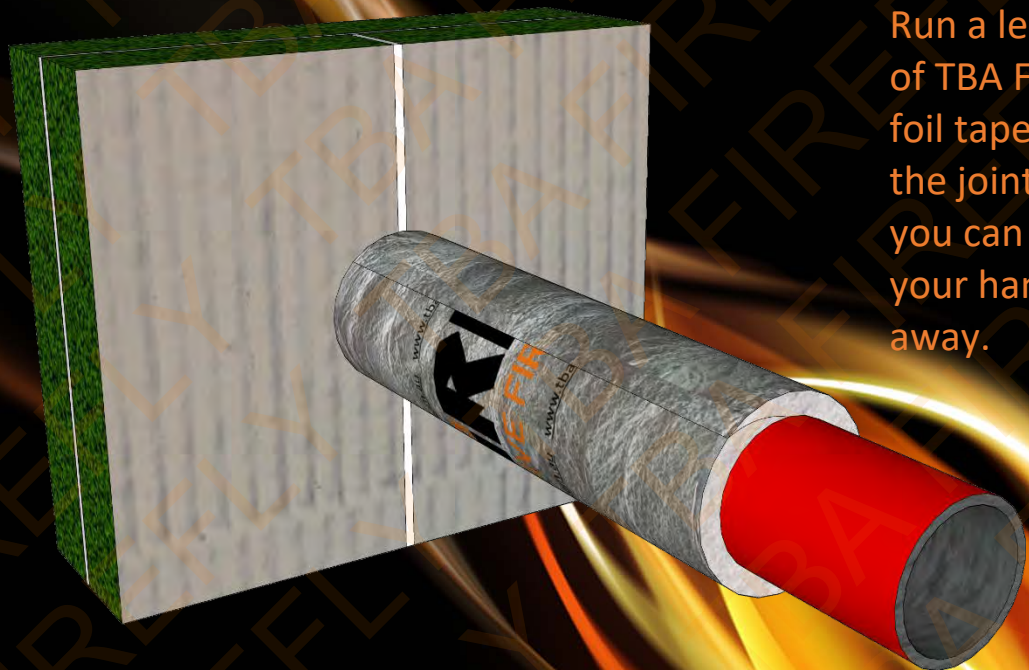
STEP 3:

Wrap it tightly around the service and overlap the joint by 50mm, hold in place.



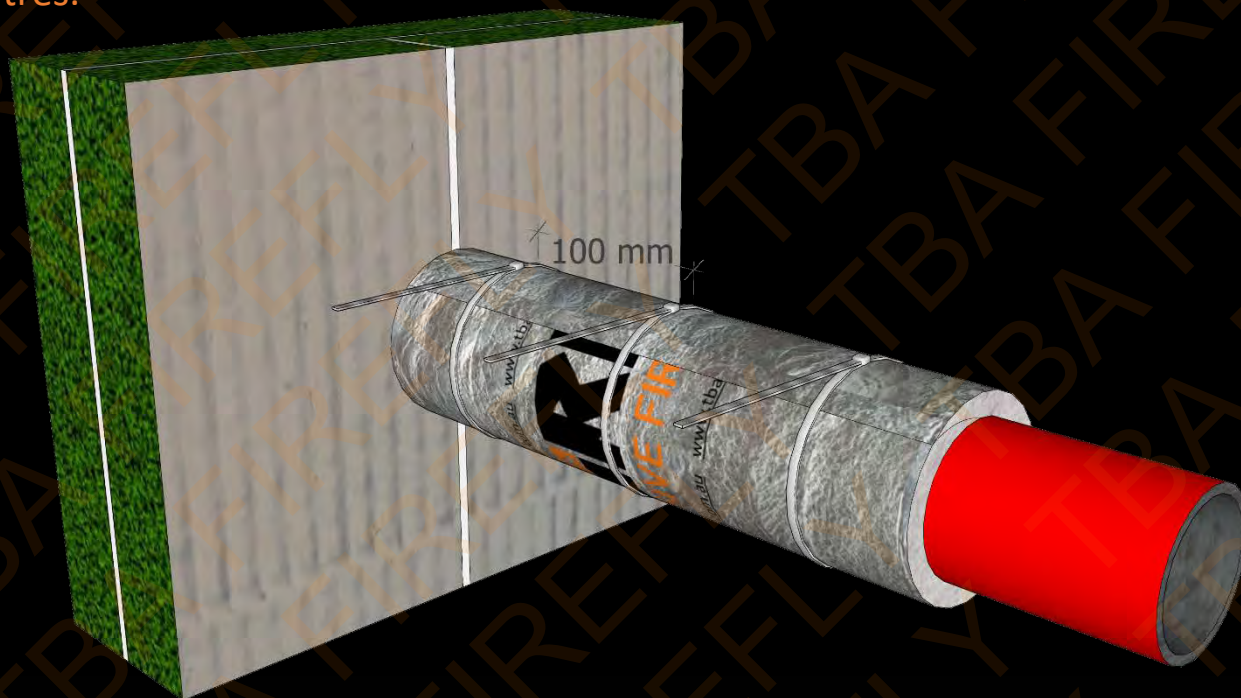
STEP 4:

Run a length of TBA Firefly™ foil tape over the joint, then you can move your hands away.



STEP 5:

Install the stainless steel cable ties 50mm from either end and then @ 100mm centres.



STEP 6:

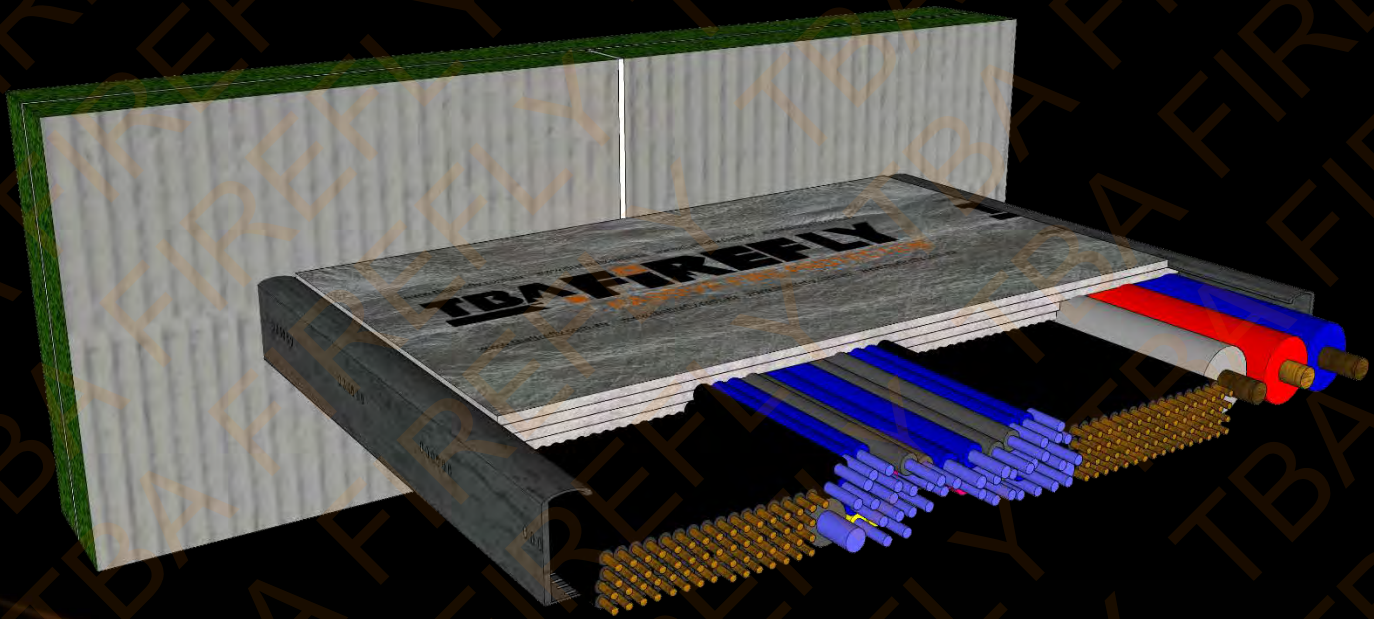
Trim off the cable ties for an aesthetic look.



WRAPPING A SHAPE WITH A CAVITY

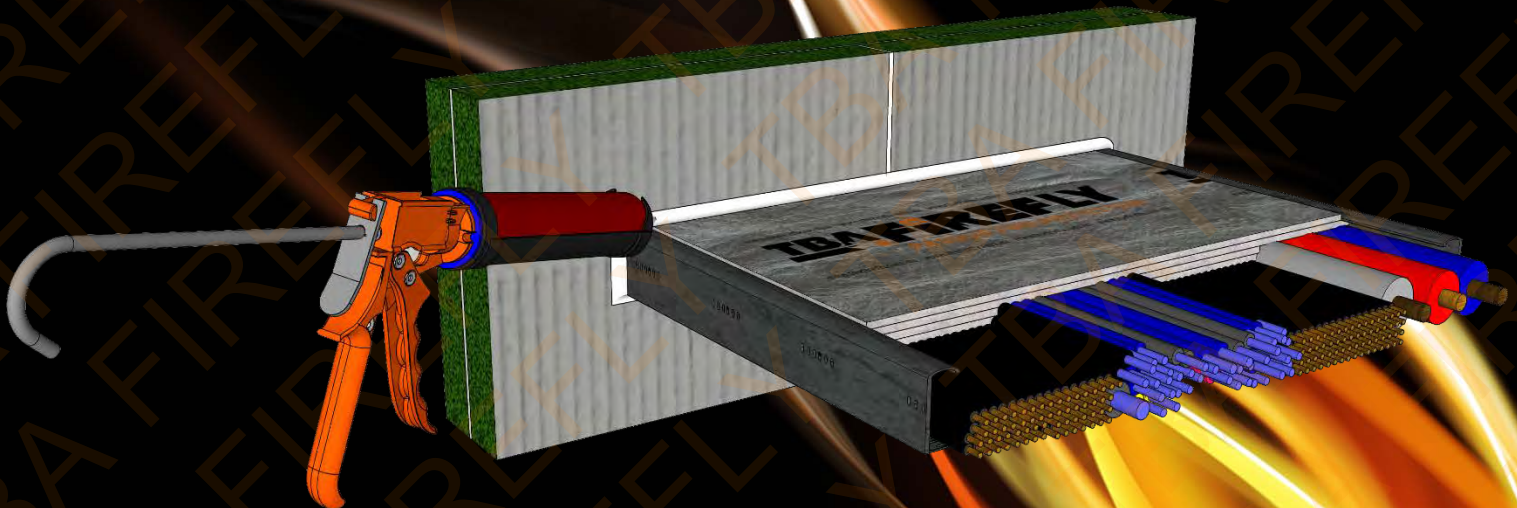
STEP 1:

Cut pieces of TBA Firefly™ Penowrap® to various sizes and pack out the cavity to turn the shape into a rectangle.



STEP 2:

Run a 6mm bead of TBA Firefly™ Intumastic around the junction between the service penetration and the substrate or the 2 layers of TBA Firefly™ Intubatt®.



STEP 3:

Cut the TBA Firefly™ Penowrap® to length (perimeter plus 50mm). Then squidge the bead of TBA Firefly™ Intumastic with the end of the TBA Firefly™ Penowrap®.

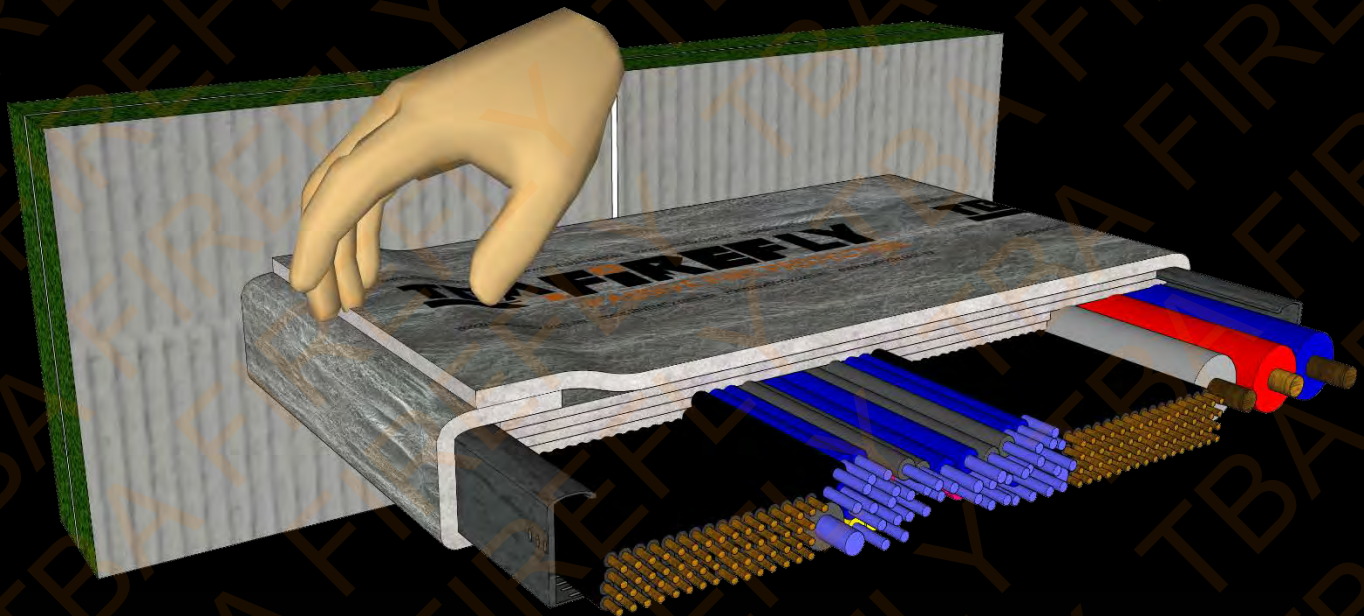
STEP 4:

Keeping the wrap taught with 1 hand, wrap it tightly around the service penetration.



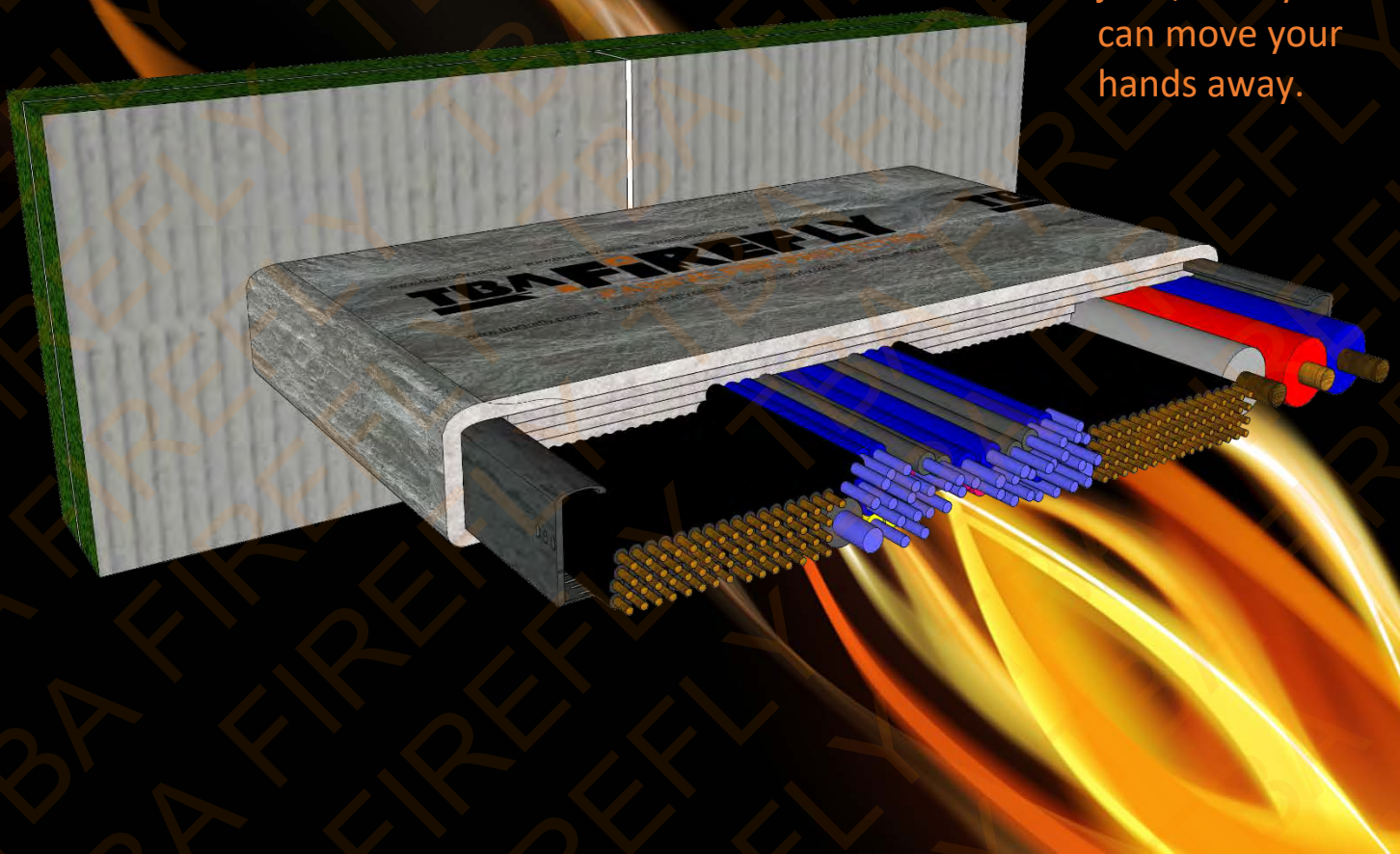
STEP 5:

Overlap the TBA Firefly™ Penowrap® by 50mm.



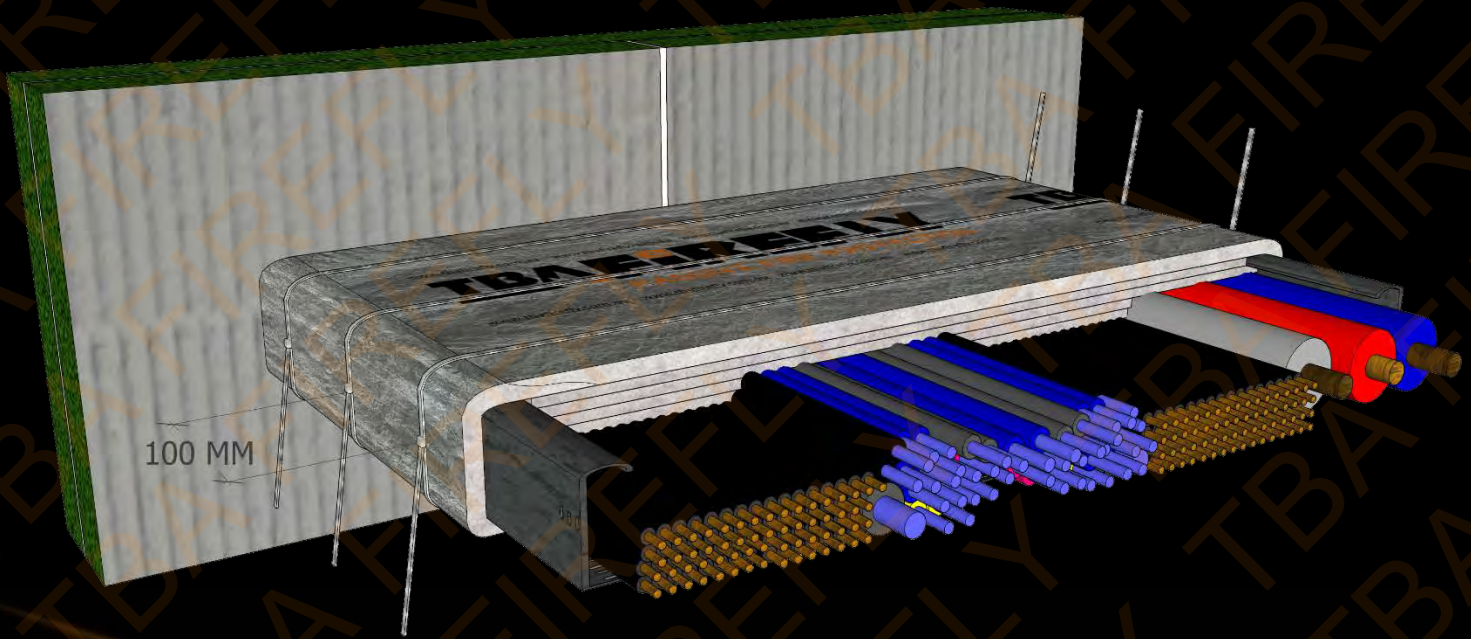
STEP 6:

Run a length of TBA Firefly™ foil tape over the joint, then you can move your hands away.



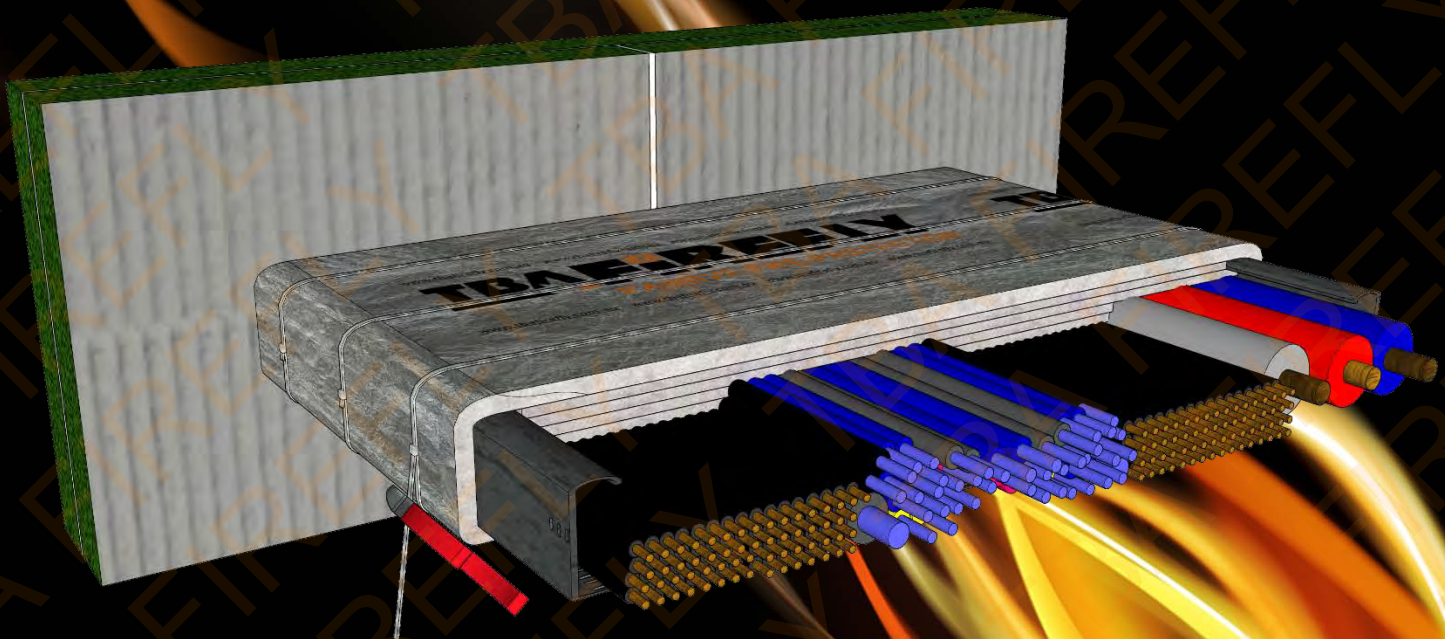
STEP 7:

Install the stainless steel cable ties 50mm from either end and then @ 100mm centres.



STEP 8:

Trim off the cable ties for an aesthetic look.



APPLICATIONS

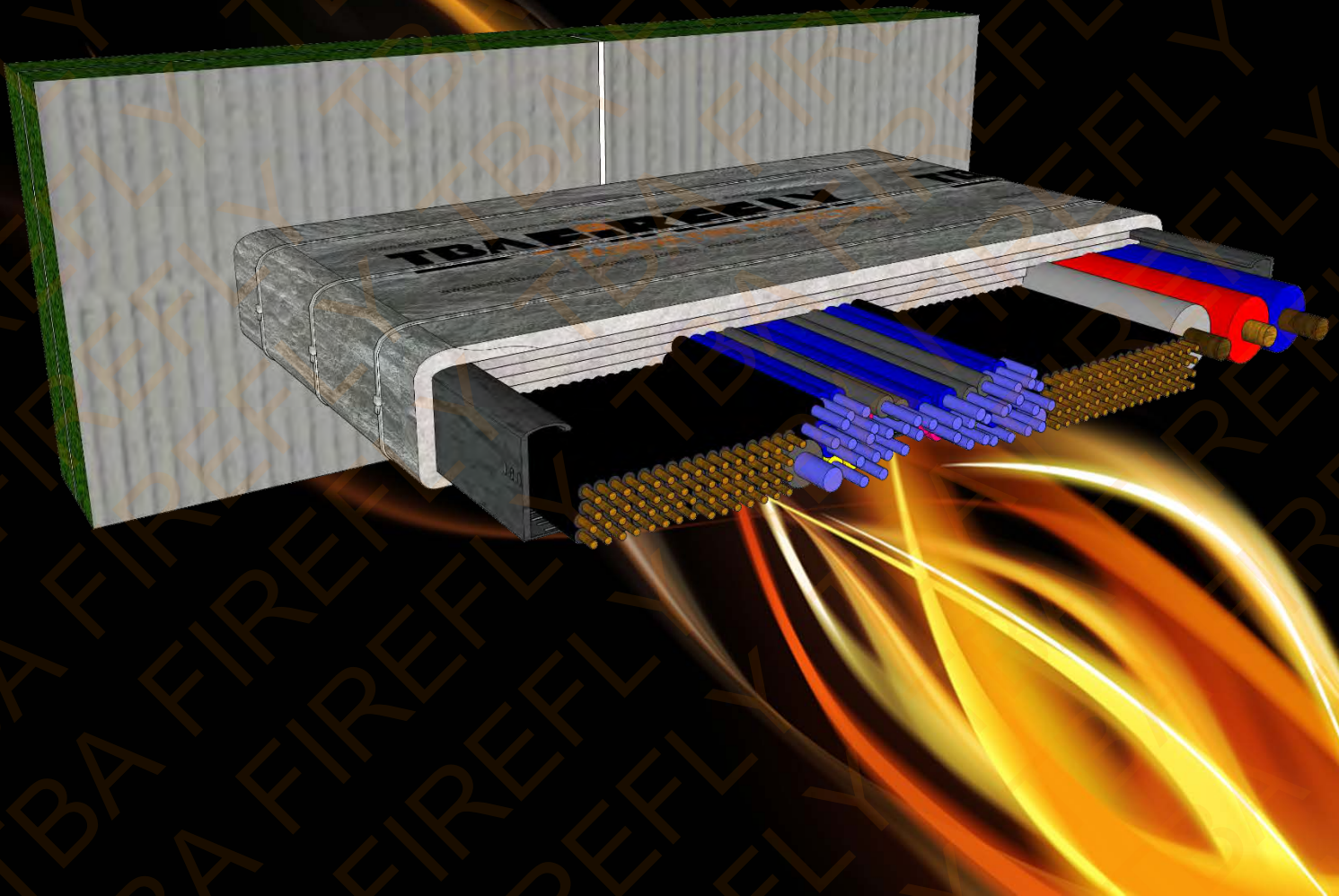
The length of TBA Firefly™ Penowrap® required is determined by the specific ID No's contained within the relevant Regulatory Information Reports from an Accredited Testing Laboratory which meet Specification A2.3 of NCC2016 (and prior versions) and Schedule 5 of NCC2019 for full DTS Compliance Tested System FRL's.

These reports detail the specific service penetration, specific substrate and contain full construction details for the required FRL.

Some of our applications are protecting service penetrations directly through core holes in various substrates. However, a vast majority are through our double TBA Firefly™ Intubatt® Seals within various substrates.

Note: All edges, joints and abutments of the TBA Firefly™ Intubatt® must be painted with TBA Firefly™ Intumastic leaving no green edges showing.

Please ensure that you check the relevant Regulatory Information Reports to ensure FRL Compliance for your specific application.



OVERVIEW OF JUST SOME OF OUR TESTED SYSTEMS

CORE HOLES THROUGH MINIMUM 100mm THICK MASONRY BLOCK OR HEBEL WALLS

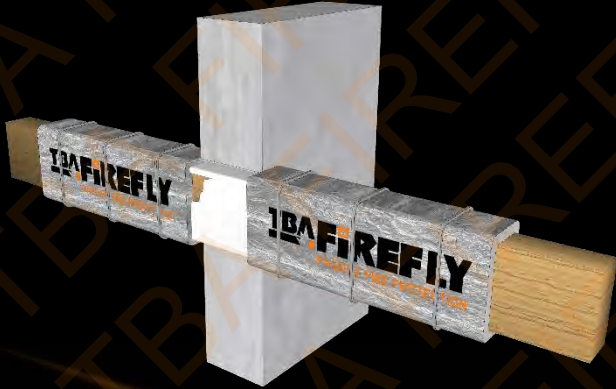
STEEL I BEAMS

300mm wrap
to both sides.
FRL-/120/120



TIMBER BEAMS

300mm wrap
to both sides.
FRL-/120/120



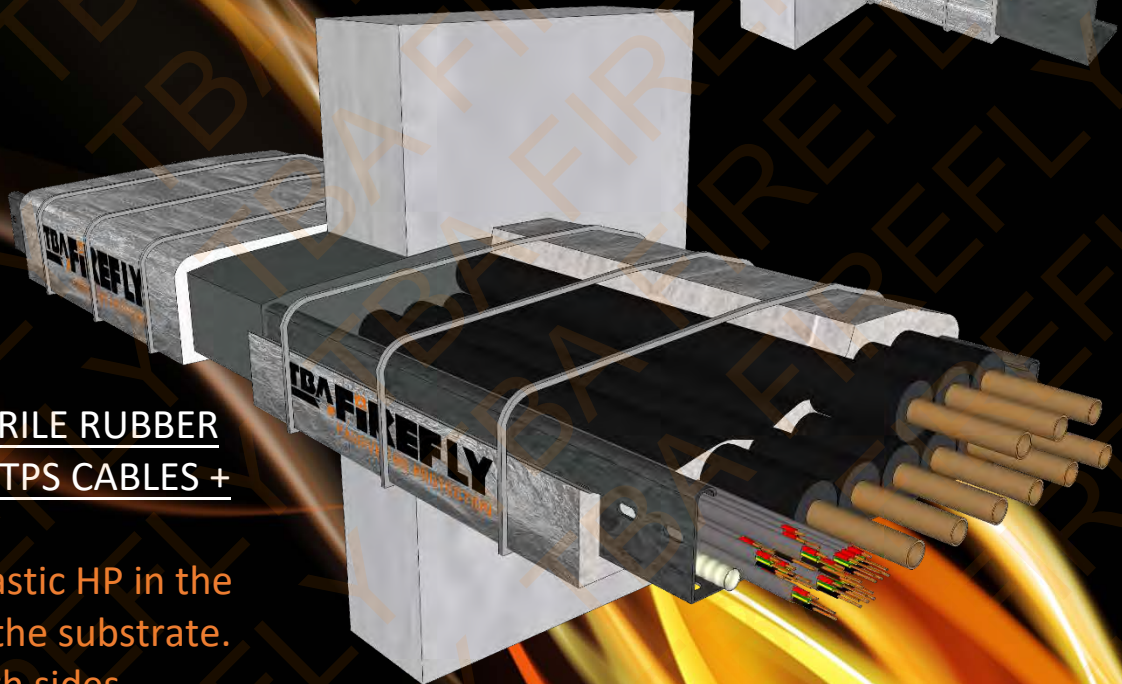
STEEL C or Z PURLINS

300mm wrap
to both sides.
FRL-/120/120



CABLE TRAY + 9 NITRILE RUBBER LAGGED PIPES + 20 TPS CABLES + PVC DRAIN PIPE

TBA Firefly™ Intumastic HP in the
annular gap within the substrate.
300mm wrap to both sides.
FRL-/120/120



STEEL PIPES UP TO 40mm OD

300mm wrap
to both sides.
FRL-/120/120



STEEL PIPES 41mm UP TO 300mm OD

500mm wrap + 50mm Intumastic HP
Fillet to both sides.
FRL-/120/120



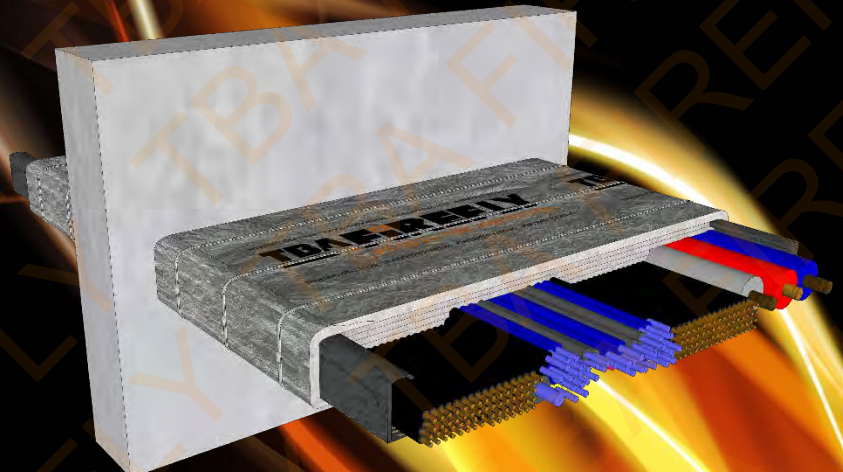
COPPER PIPES UP TO 150mm OD

600mm wrap
to both sides.
FRL-/120/120



ALL COPPER CORE
POWER CABLES WITH or
without STEEL CABLE
TRAY

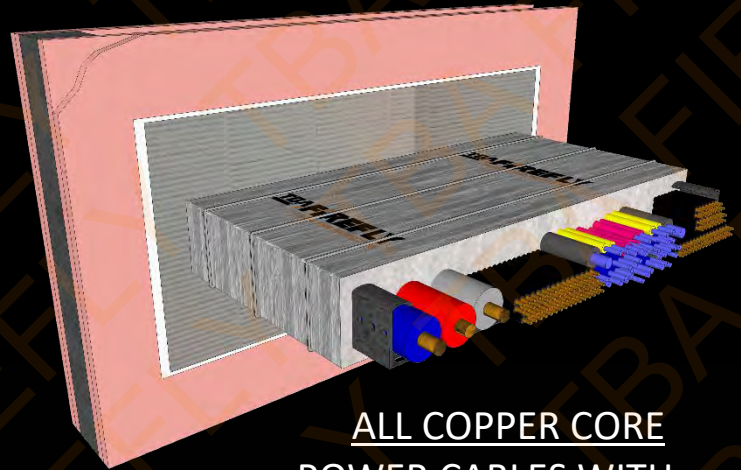
300mm wrap
to both sides.
FRL-/120/120



**DOUBLE TBA FIREFLY™ INTUBATT® SEAL
WITHIN A 2HR FR PLASTERBOARD WALL**

ALL VASS HFC AND HFA BUSWAYS

See Table 3 of RIR34088500 for
length required.
FRL-/120/120



ALL COPPER CORE
POWER CABLES WITH or
without STEEL CABLE
TRAY

300mm wrap
to both sides.
FRL-/120/120

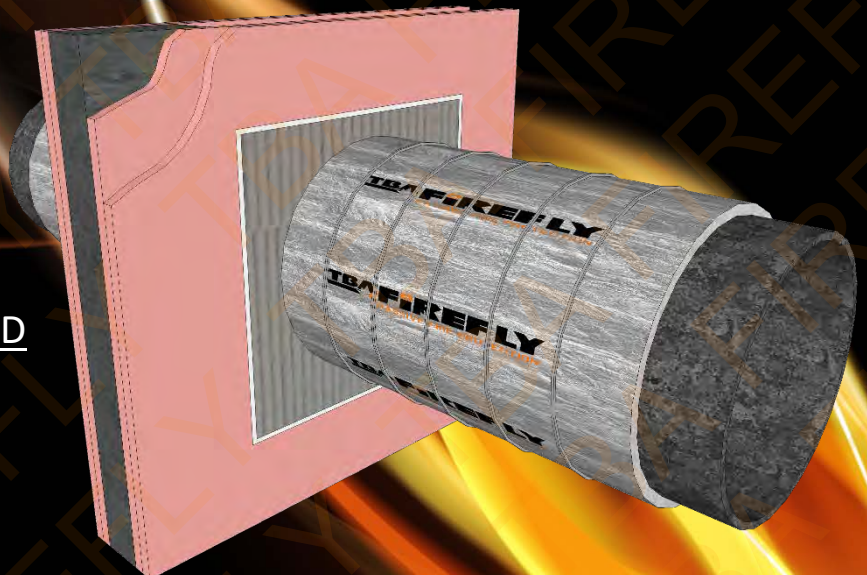


COPPER PIPES UP TO 150mm OD

600mm wrap
to both sides.
FRL-/120/120

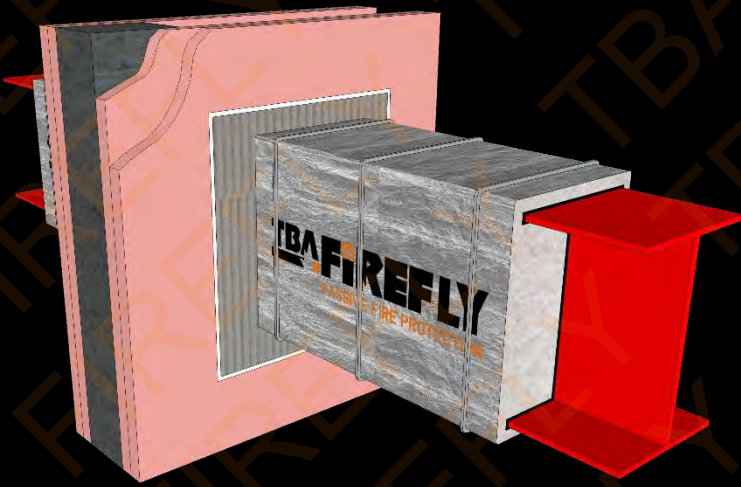
STEEL PIPES 41mm UP TO 300mm OD

500mm wrap to both sides.
FRL-/120/120



STEEL I BEAMS

300mm wrap
to both sides.
FRL-/120/120



STEEL C or Z PURLINS

300mm wrap
to both sides.
FRL-/120/120



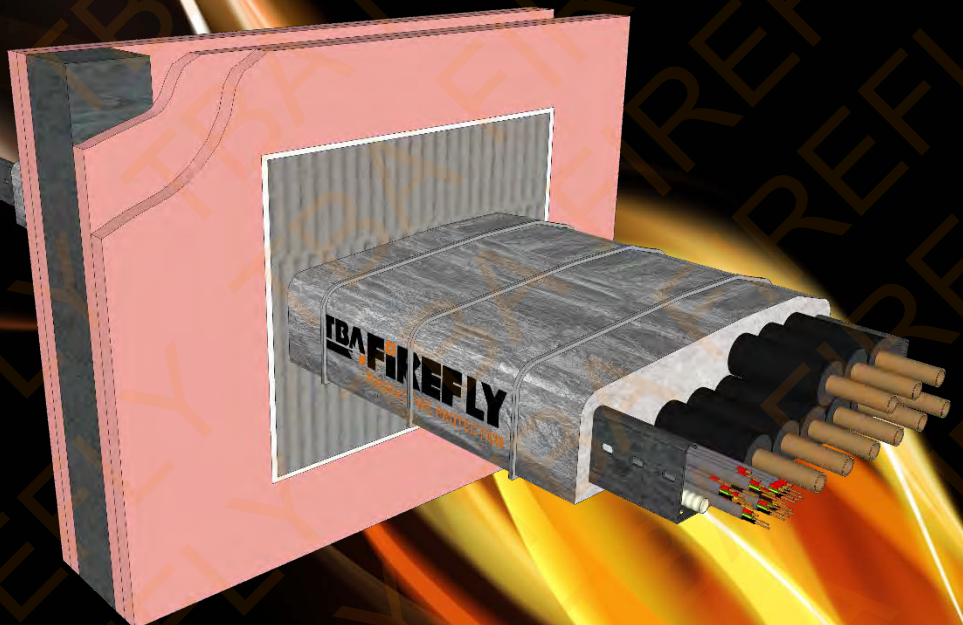
TIMBER BEAMS

300mm wrap
to both sides.
FRL-/120/120



CABLE TRAY + 9 NITRILE RUBBER LAGGED PIPES + 20 TPS CABLES + PVC DRAIN PIPE

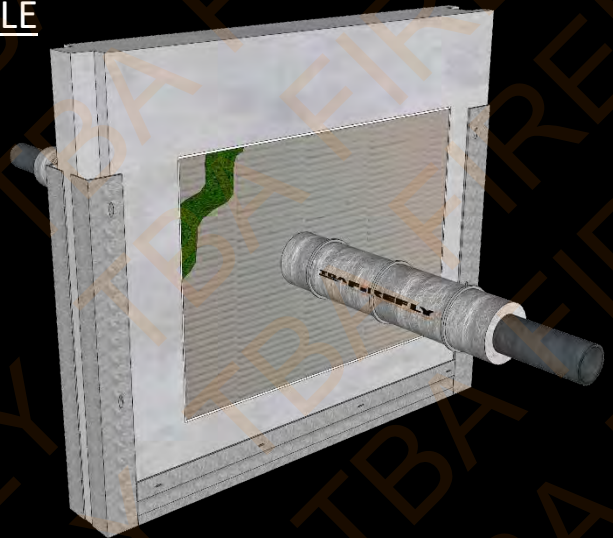
TBA Firefly™ Intumastic HP in
the annular gap within the
substrate. 300mm wrap
to both sides.
FRL-/120/120



**DOUBLE TBA FIREFLY™ INTUBATT® SEAL
WITHIN 2HR HEBEL POWERPANEL WALLS**

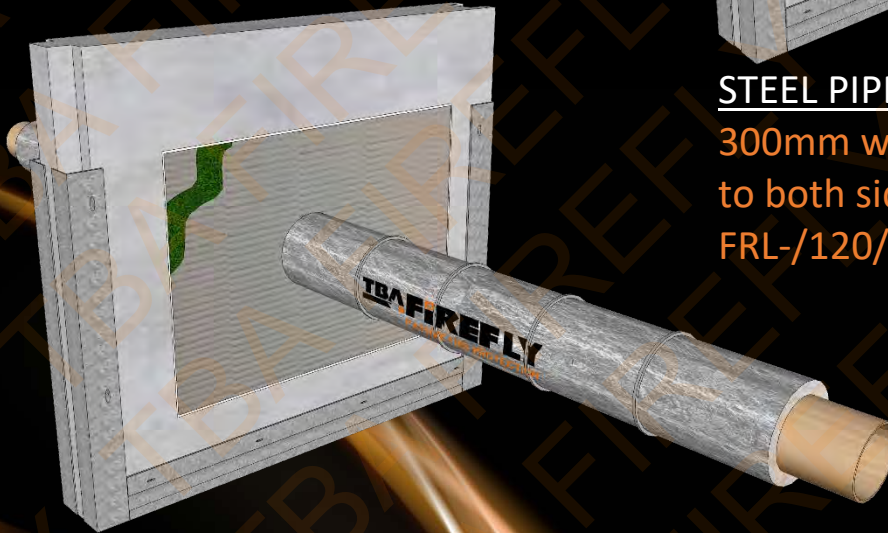
ALL COPPER CORE
POWER CABLES WITH or
without STEEL CABLE
TRAY

300mm wrap
to both sides.
FRL-/120/120



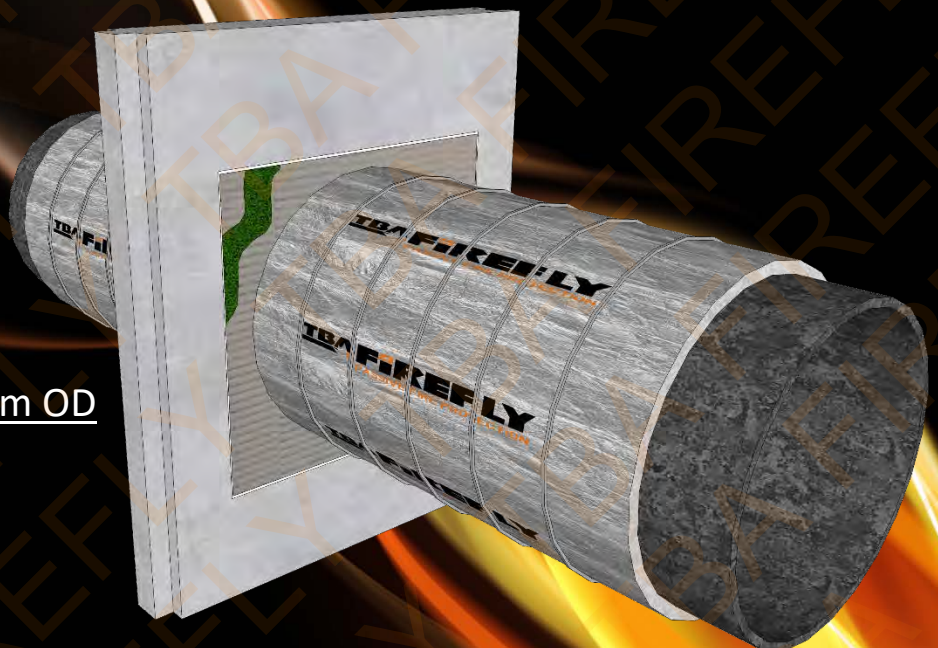
COPPER PIPES UP TO 150mm OD

600mm wrap
to both sides.
FRL-/120/120



STEEL PIPES UP TO 40mm OD

300mm wrap
to both sides.
FRL-/120/120

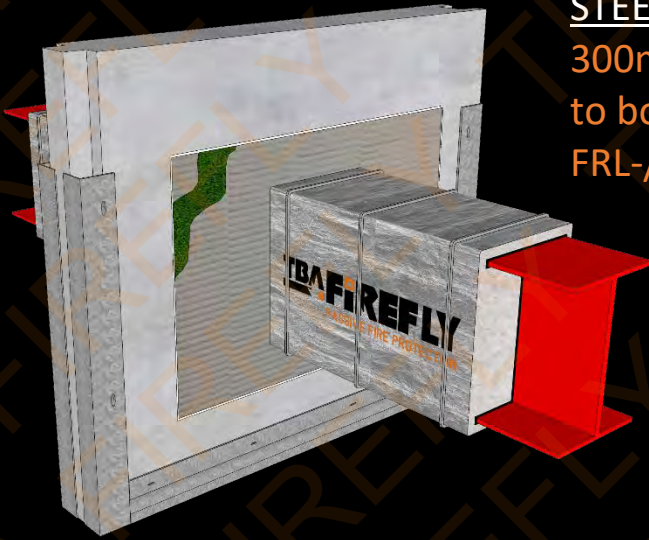


STEEL PIPES 41mm UP TO 300mm OD

500mm wrap to both sides.
FRL-/120/120

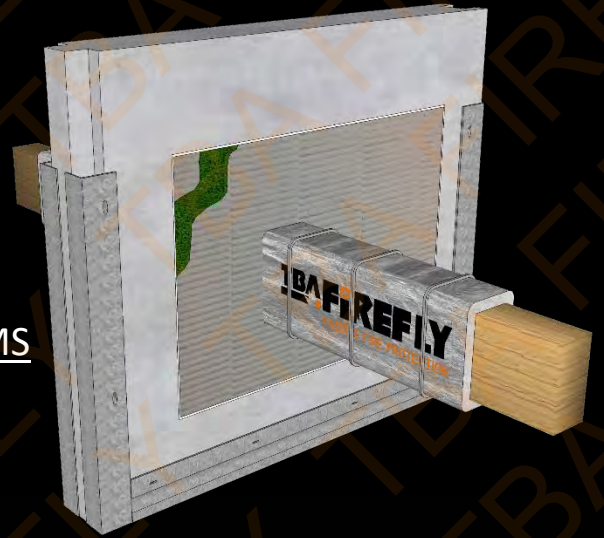
STEEL I BEAMS

300mm wrap
to both sides.
FRL-/120/120



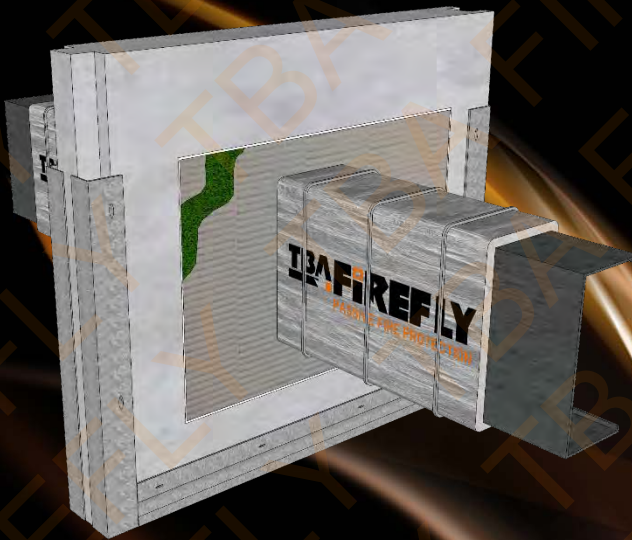
TIMBER BEAMS

300mm wrap
to both sides.
FRL-/120/120



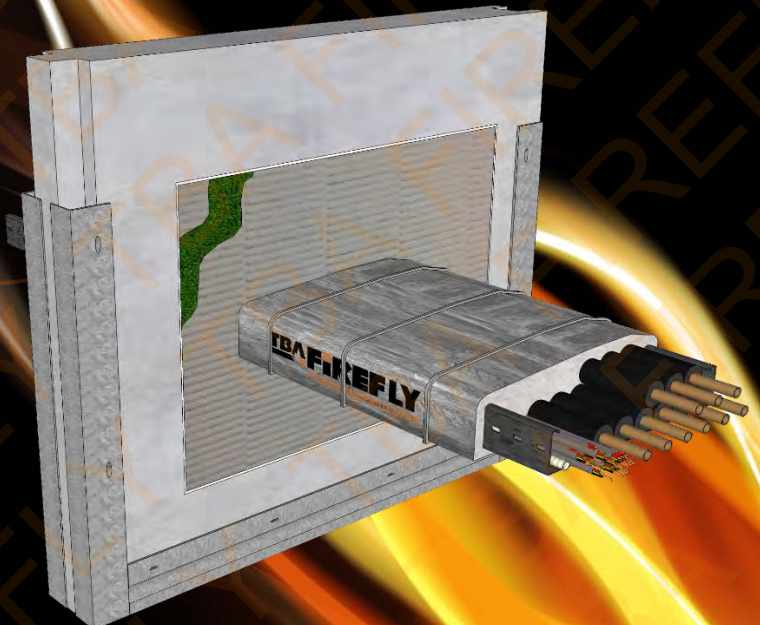
STEEL C or Z PURLINS

300mm wrap
to both sides.
FRL-/120/120



CABLE TRAY + 9 NITRILE RUBBER LAGGED PIPES + 20 TPS CABLES + PVC DRAIN PIPE

TBA Firefly™ Intumastic HP in
the annular gap within the
substrate. 300mm wrap
to both sides.
FRL-/120/120



**DOUBLE TBA FIREFLY™ INTUBATT® SEAL 1 IN & 1 PATRESS FIXED TO THE FACE
OF 2HR SPEEDPANEL WALLS**

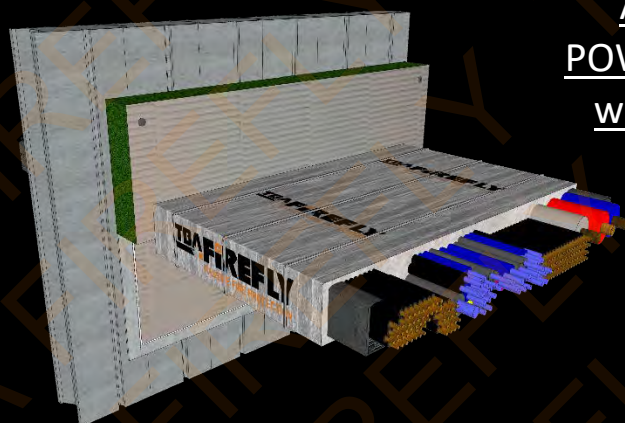
NOTE:

**All green edges
must be painted
with TBA Firefly™
Intumastic**

ALL COPPER CORE
POWER CABLES WITH or
without STEEL CABLE

TRAY

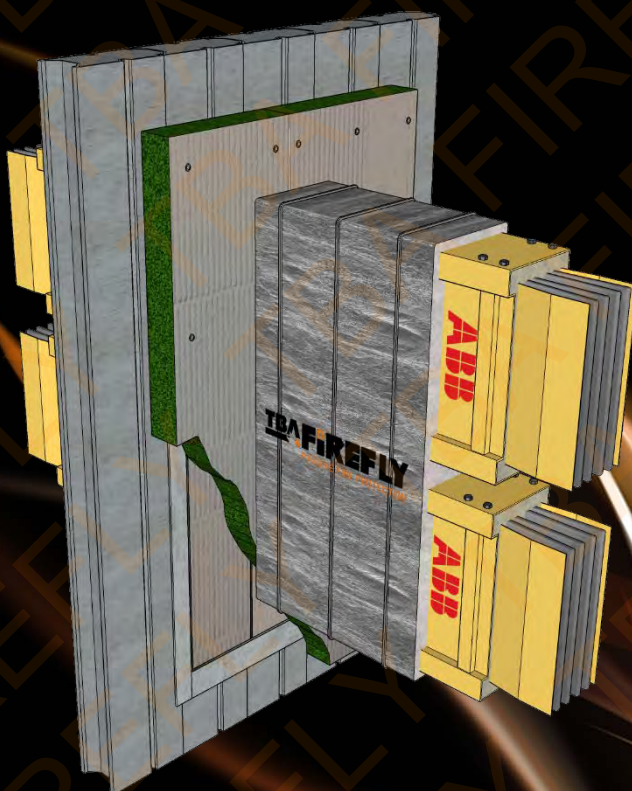
300mm wrap
to both sides.
FRL-/120/120



ALL VASS HFC AND HFA BUSWAYS

See Table 3 of RIR34088500 for
length required.

FRL-/120/120



ALL ABB SANDWICH IP55 BUSDUCTS

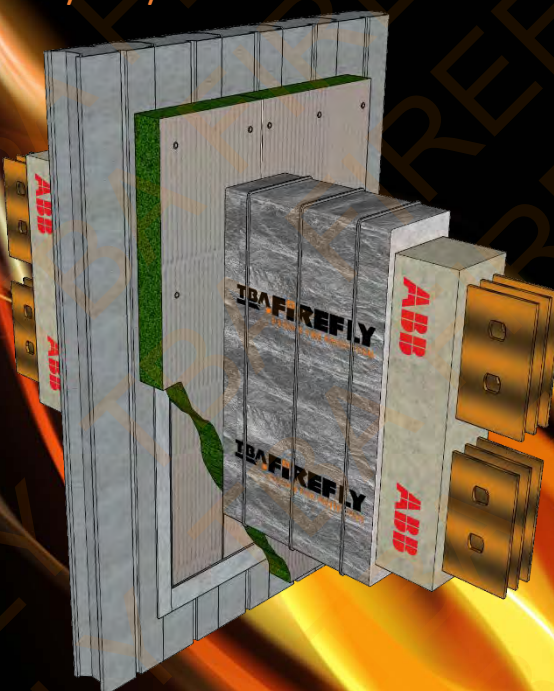
See Table 3a of RIR34088500 for
length required.

FRL-/120/120

ALL ABB CAST RESIN IP68 BUSDUCTS

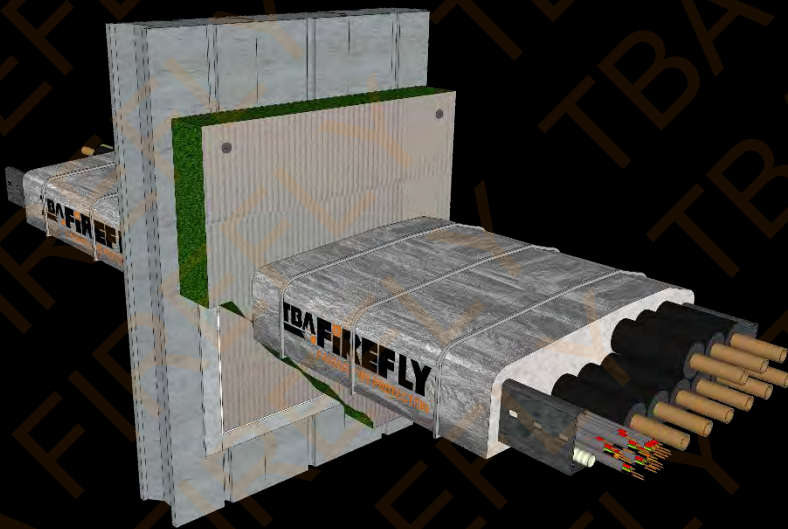
See Table 3b of RIR34088500 for
length required.

FRL-/120/120

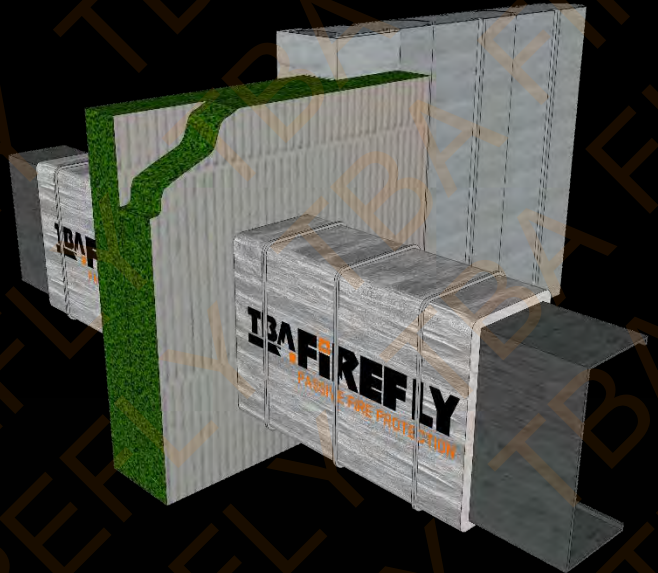


CABLE TRAY + 9 NITRILE RUBBER
LAGGED PIPES + 20 TPS CABLES +
PVC DRAIN PIPE

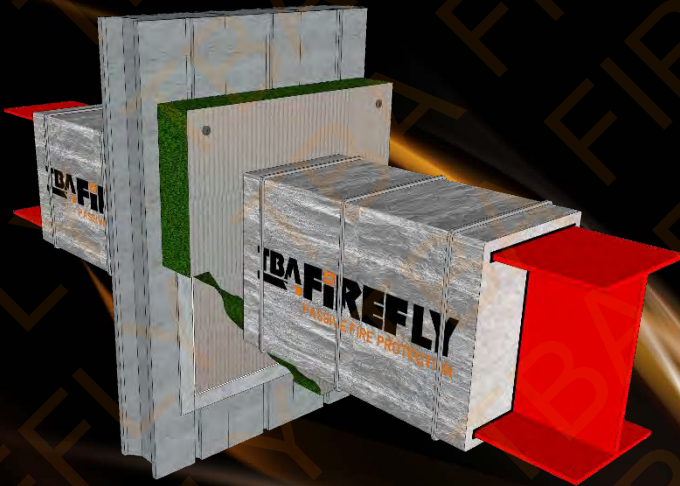
TBA Firefly™ Intumastic HP in the
annular gap within the substrate.
300mm wrap to both sides.
FRL-/120/120



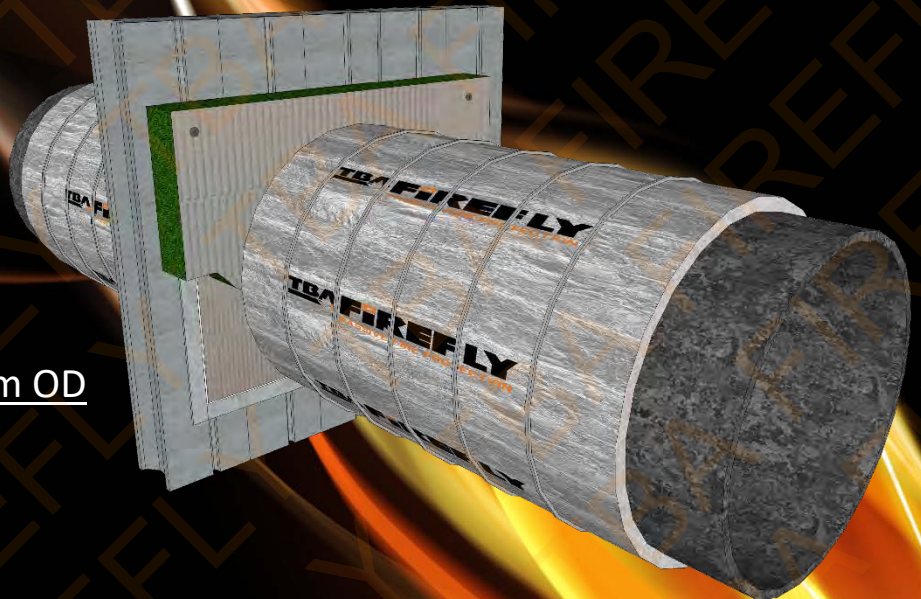
STEEL I BEAMS
300mm wrap
to both sides.
FRL-/120/120



STEEL C or Z PURLINS
300mm wrap
to both sides.
FRL-/120/120



STEEL PIPES 41mm UP TO 300mm OD
500mm wrap to both sides.
FRL-/120/120



**DOUBLE TBA FIREFLY™ INTUBATT® SEAL WITHIN
90MIN CLT WALLS 105mm CLT WITH 1 LAYER OF 16mm FR PLASTERBOARD TO EITHER SIDE**

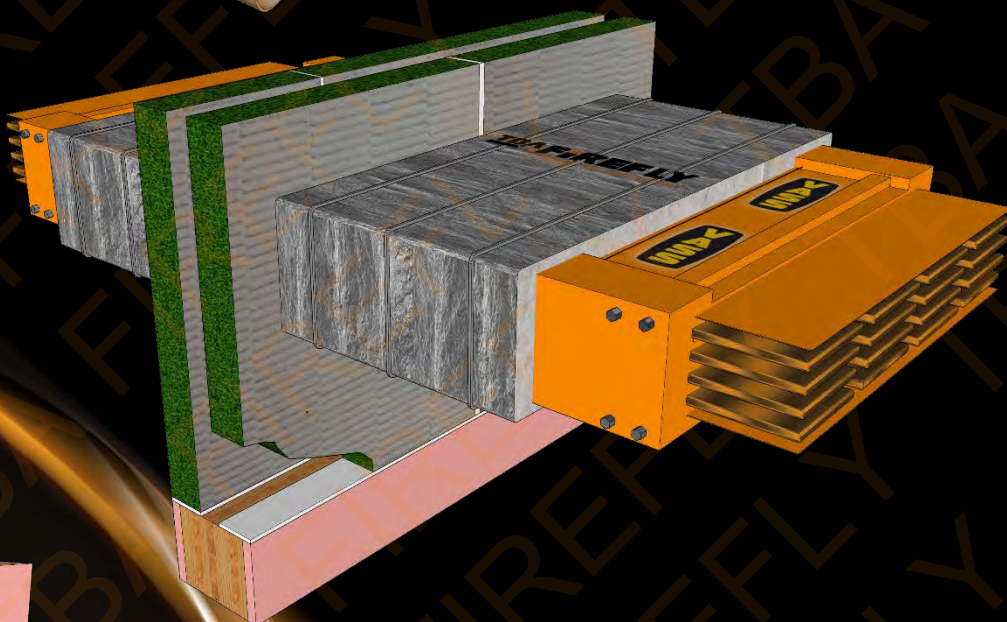


COPPER PIPES UP TO 150mm OD

600mm wrap
to both sides.
FRL-/90/90

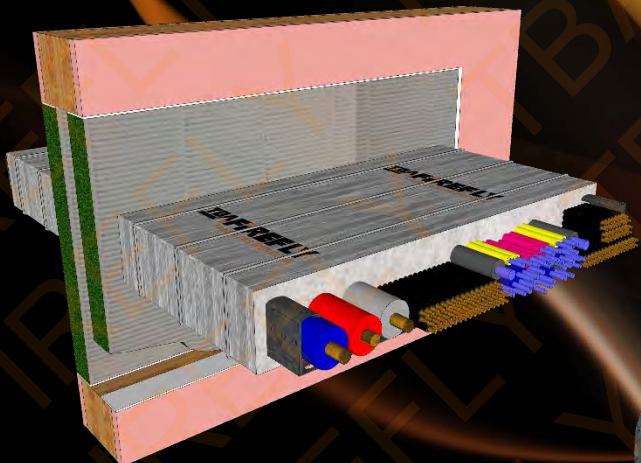
ALL VASS HFC AND HFA BUSWAYS

See Table 3 of RIR34088500 for
length required.
FRL-/90/90



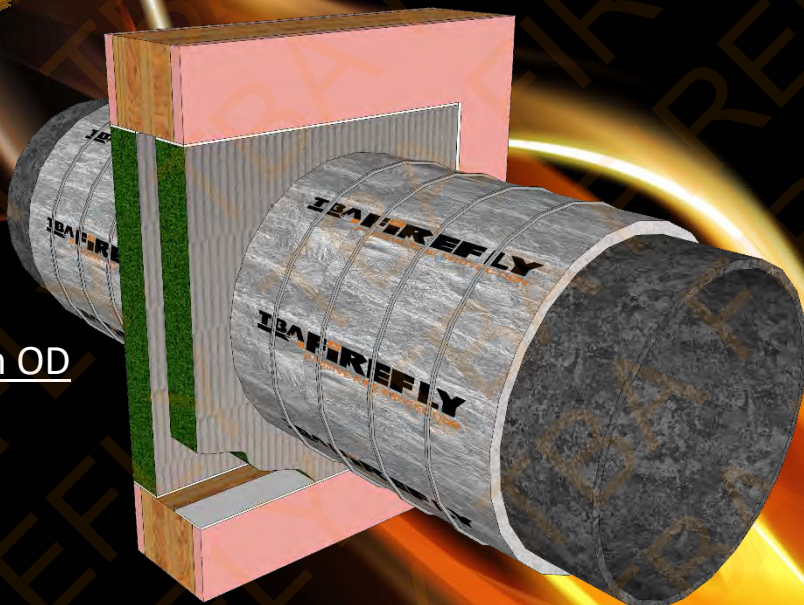
ALL COPPER CORE
POWER CABLES WITH or
without STEEL CABLE
TRAY

300mm wrap
to both sides.
FRL-/90/90



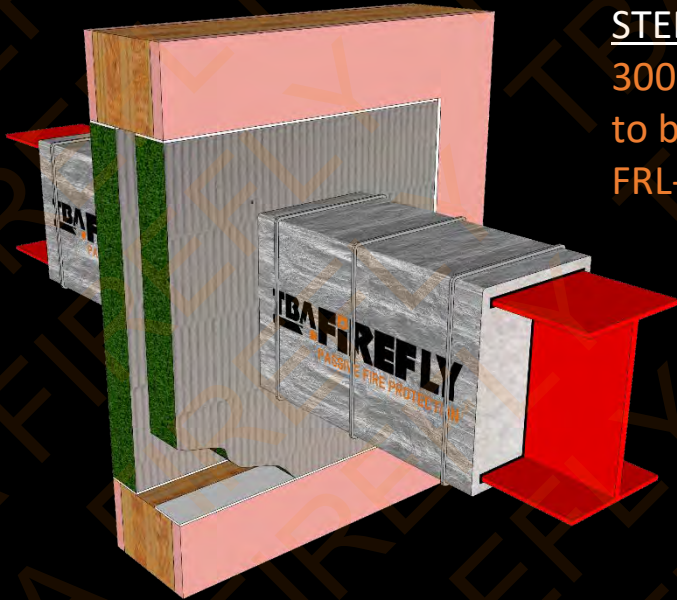
STEEL PIPES 41mm UP TO 300mm OD

350mm wrap to both sides.
FRL-/90/90



STEEL I BEAMS

300mm wrap
to both sides.
FRL-/90/90



TIMBER BEAMS

300mm wrap
to both sides.
FRL-/90/90



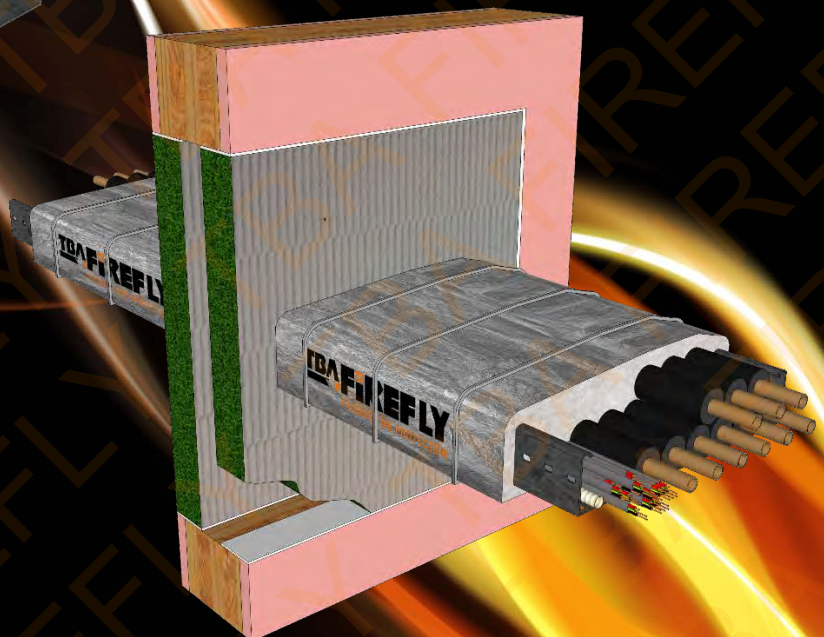
STEEL C or Z PURLINS

300mm wrap
to both sides.
FRL-/90/90



CABLE TRAY + 9 NITRILE RUBBER LAGGED PIPES + 20 TPS CABLES + PVC DRAIN PIPE

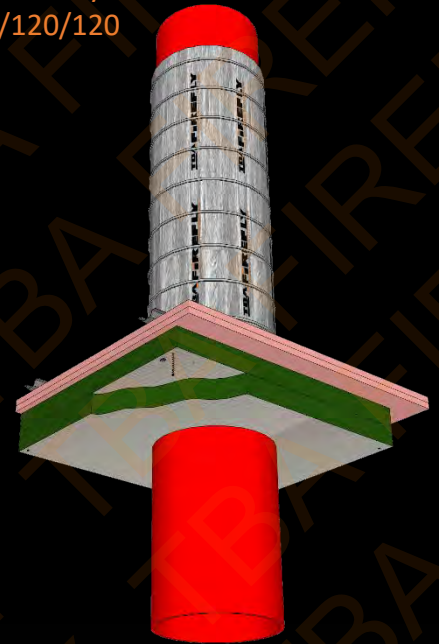
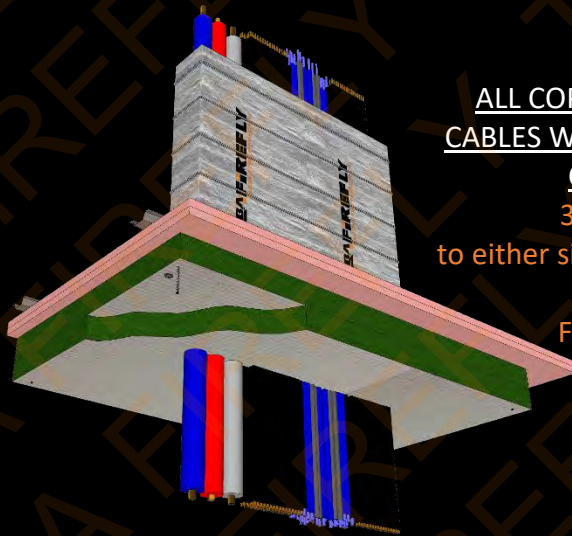
TBA Firefly™ Intumastic HP in
the annular gap within the
substrate. 300mm wrap
to both sides.
FRL-/90/90



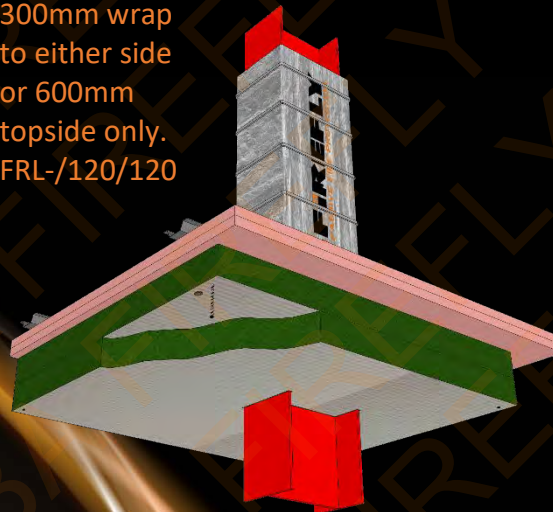
**DOUBLE TBA FIREFLY™ INTUBATT® SEAL
UNDER A 2HR FR PLASTERBOARD CEILING**

STEEL PIPES 41mm UP TO 300mm OD
500mm wrap to either side or 1m
topside only.
FRL-/120/120

ALL COPPER CORE POWER
CABLES WITH or without STEEL
CABLE TRAY
300mm wrap
to either side or 600mm topside
only.
FRL-/120/120



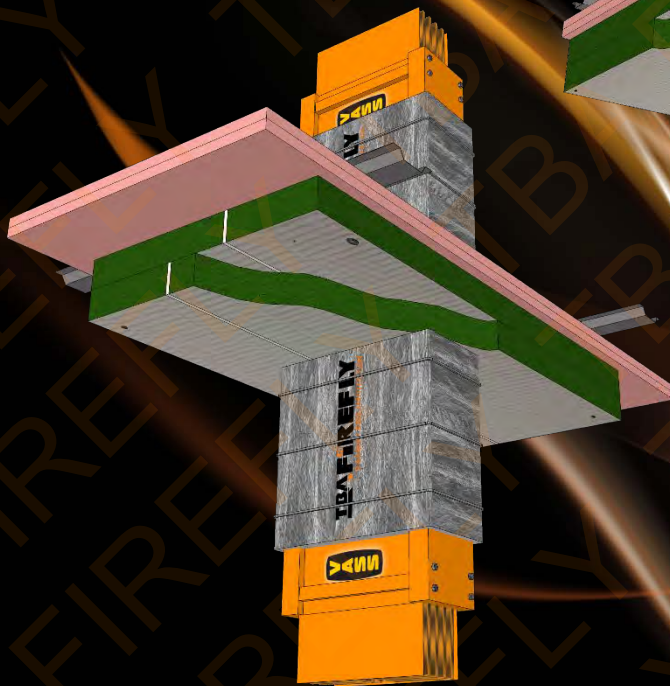
STEEL I BEAMS
300mm wrap
to either side or 600mm
topside only.
FRL-/120/120



STEEL C or Z PURLINS
300mm wrap
to either side or
600mm to topside only.
FRL-/120/120



ALL VASS HFC AND HFA BUSWAYS
See Table 8 of RIR34088500 for
length required.
FRL-/120/120



**DOUBLE TBA FIREFLY™ INTUBATT® SEAL WITHIN
A 2HR FIRE RATED MASONRY FLOOR SLAB**

ALL VASS HFC AND HFA BUSWAYS

See Table 8 of RIR34088500 for
length required.
FRL-/120/120



ALL COPPER CORE POWER
CABLES WITH or without STEEL

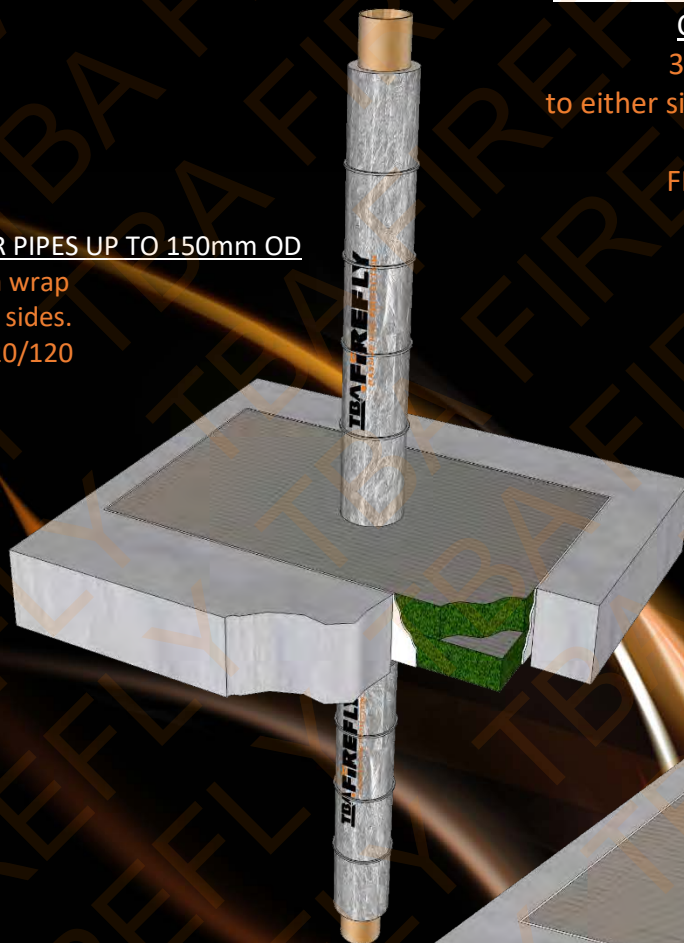
CABLE TRAY

300mm wrap
to either side or 600mm topside
only.
FRL-/120/120



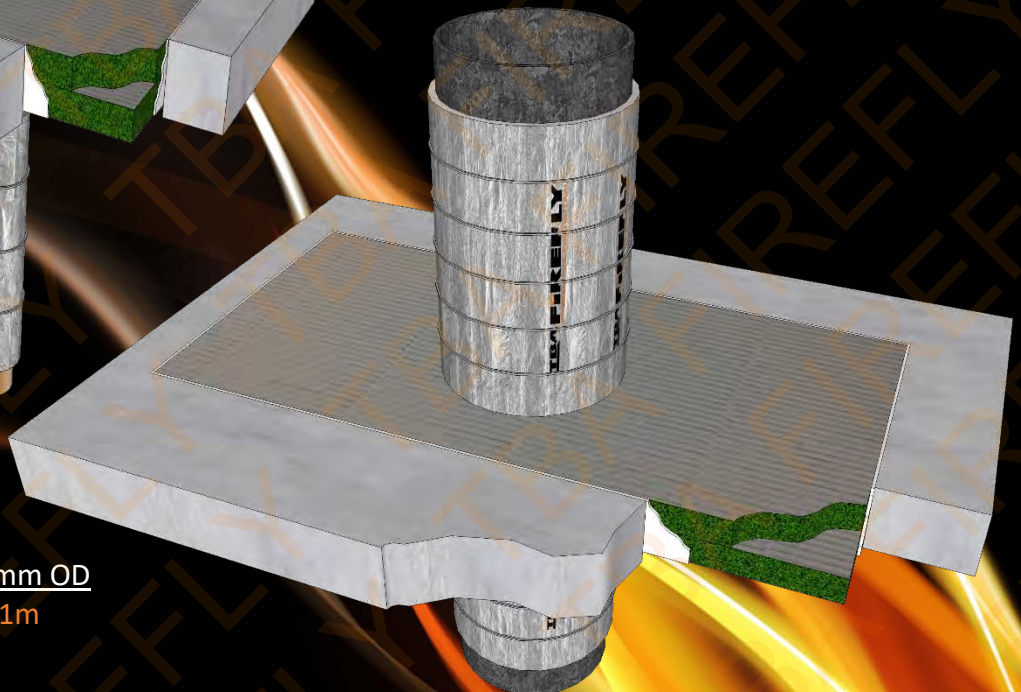
COPPER PIPES UP TO 150mm OD

600mm wrap
to both sides.
FRL-/120/120



STEEL PIPES 41mm UP TO 300mm OD

500mm wrap to either side or 1m
topside only.
FRL-/120/120



DOUBLE TBA FIREFLY™ INTUBATT® SEAL WITHIN A TIMBER FRAMED 1HR FIRE FR PLASTERBOARD CEILING

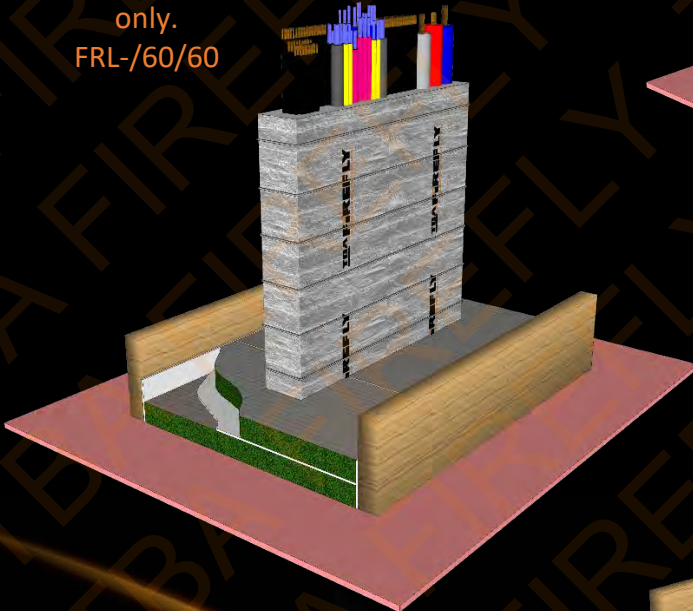
ALL COPPER CORE POWER
CABLES WITH or without STEEL

CABLE TRAY

300mm wrap

to either side or 600mm topside
only.

FRL-/60/60



ALL ABB CAST RESIN BUSDUCTS

See Table 8b of RIR34088500 for
length required.

FRL-/60/60



STEEL I BEAMS

300mm wrap

to either side
or 600mm
topside only.

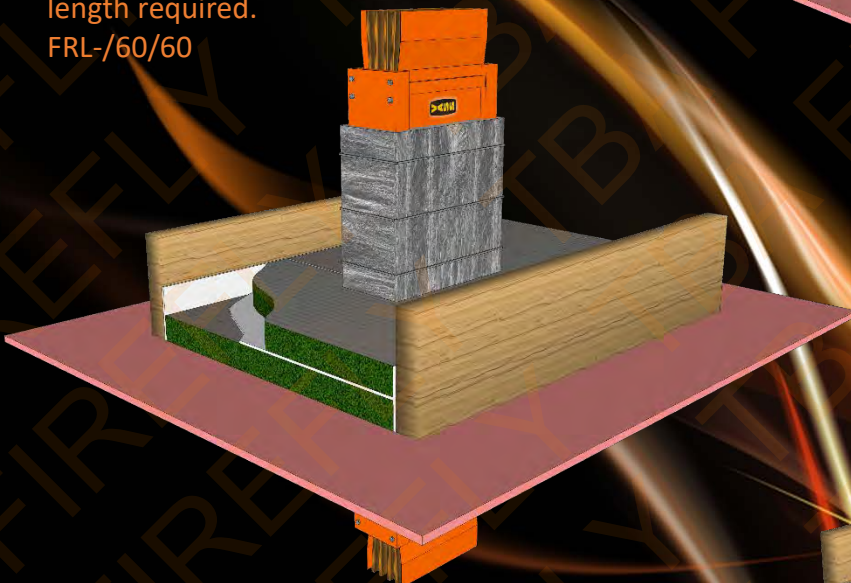
FRL-/60/60



ALL VASS HFC AND HFA BUSWAYS

See Table 8 of RIR34088500 for
length required.

FRL-/60/60



STEEL PIPES 8mm UP TO 300mm OD

300mm wrap to either side or 600mm
topside only.

FRL-/60/60

