

BLADERUNNER

Retrofit Floor Waste and Drain Collar



The BladeRUNNER is a slimline retrofit fire collar that can be easily installed around existing floor waste or drain/waste/vent pipe penetrations, providing a cost-effective alternative to expensive fire board enclosures or bulky retrofit collars. Ideal for Space-Constrained Applications, its compact design makes it a functional choice for narrow or restricted areas. An innovative solution for anyone looking to improve the fire safety of their building without breaking the bank. The BladeRUNNER incorporates a spring-loaded mechanism loaded with intumescent that can be applied underneath the slab to rectify the incorrect casted-in collar. The slimline design is also perfect for drain/waste/vent applications (AKA stack pipes) where there is no room for a traditional bulky retro-fit fire collar. In addition to being a cost-effective and practical solution, the BladeRUNNER is also easy to install. No specialist equipment or expertise needed.

KEY FEATURES

- Slimline design corrosion resistant materials
- Innovative spring-loaded mechanism
- Tested for PVC stack & floor waste pipes
- Fire tested to AS1530.4:2014
- Easily installed over existing cast-in fire collars
- Simple install
- Australian made

APPLICATIONS

Fire tested to AS1530.4, BLADERUNNER retro-fit Floor Waste collars are tested for PVC pipe materials connected to P-traps, 4-way risers and elbow fittings directly underneath the slab for the following:

- Retro-fit floor waste applications
- Retro-fit Stack pipe penetrations
- Retrofit drain/waste/vent applications
- 40-100mm PVC pipes
- Upgrade incorrect cast-in collars
- Upgrade floor wastes that don't have cast-in collars
- Socket/ fittings with P-trap and 4-way risers

TRADES



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WHAT IS BLADERUNNER?

Trafalgar are proud to introduce our new Australian Made BLADERUNNER, a retro-fit fire collar designed for use specifically for upgrading existing floor waste pipe penetrations for up to 4 hours FRL's and have been tested to AS1530.4-2014. The BLADERUNNER incorporates a spring-loaded mechanism loaded with intumescent that can be applied underneath the slab to rectify any incorrect cast-in collar or where no collar has been fitted at all. .

Floor waste applications are not continuous pipes, often having a metal grill finished at the floor level and a water trap installed below. The standard intumescent fire collars will not close off the penetration quickly enough to prevent early fire spread of fire through the floor grate, so a cast-in floor waste collar incorporating mechanical shutting mechanisms and are often specified to effectively close off the penetration, stopping the spread of fire in this unique application.

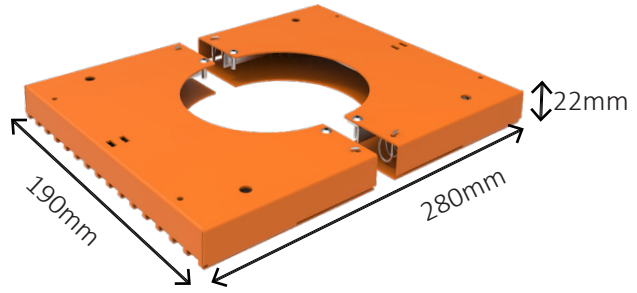
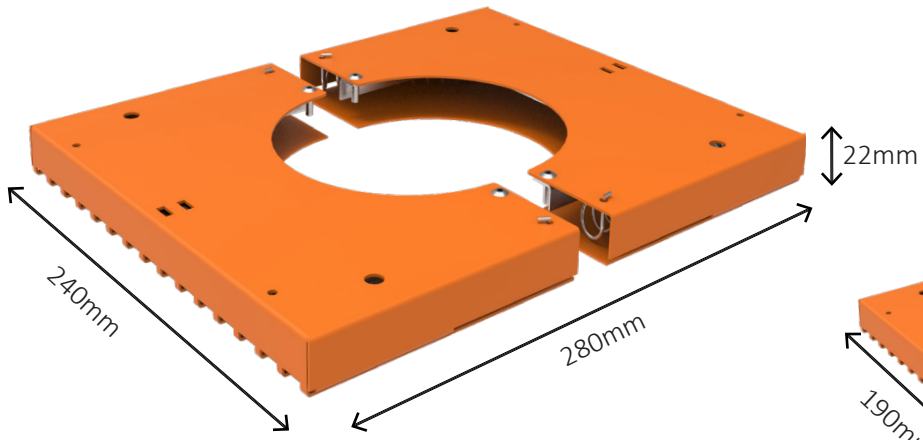
Often the incorrect cast-in collar has been previously installed, resulting in compliance headaches and expensive rectification options using fire boards to construct large enclosures, or bulky retro fit collars that struggle to fit around the water trap. This creates implications as other services have already been secured and often the large fire-rated board bulkhead is not practical. The BLADERUNNER is only 22mm thick and is supplied in two halves to be bolted to the slab around a P-Trap without compromising the spacing of existing services. The slimline design is perfect for drain/waste/vent applications (AKA stack pipes) where there is no room for a traditional bulky retro-fit fire collar.

APPLICATIONS:


- Upgrading existing cast-in collars- both stack and floor waste pipes
- Upgrading floor waste and stack pipes penetrations that don't have a cast-in collar
- Retro-fit floor waste and stack PVC pipes with 100mm & 50mm pipes
- PVC pipes
- P-Trap and 4-way riser arrangements with socket fitting inside penetration
- 90 degree elbow fitting located inside penetration for 50mm & 100mm stack pipes




SPECIFICATIONS



BLADERUNNER- FWR-B100

	Casing	Powder coated steel
	Internal metal components	Galvanised and spring steel
	Intumescent	Trafalgar's Australian made high grade expansion
	Dimensions	Each half: 240x140x22mm
	Pieces per unit	2x halves
	Sealant	Not required
	Fixings (not supplied)	Steel M6x50mm masonry anchors (dynabolts or anka screws)

BLADERUNNER MINI- FWR-B50

	Casing	Powder coated steel
	Internal metal components	Galvanised and spring steel
	Intumescent	Trafalgar's Australian made high grade expansion
	Dimensions	Each half: 190x140x22mm
	Pieces per unit	2x halves
	Sealant	Not required
	Fixings (not supplied)	Steel M6x50mm masonry anchors (dynabolts or anka screws)

SYSTEM SELECTION TABLE



Collar Size	Pipe Size (mm)					Application			
	40	50	65	80	100	Floor Waste (FW)	Floor Waste Upgrade (over existing collar)	Stack pipes (DWV)	Elbow, Socket or Trap inside
BladeRUNNER Mini	✓	✓	✓	X	X	✓	✓	✓	✓
BladeRUNNER 100	X	X	X	✓	✓	✓	✓	✓	✓

Note: Subject to Approvals and FRL's on page 7



COMPLIANCE

FIRE RESISTANCE LEVEL

FIRE RATING – HOW IS FIRE PERFORMANCE MEASURED?

An FRL (fire resistance level) is a handy way of summarising the performance of a building element. It consists of 3 numbers, all given in minutes:

FRL -/240/240

(example)



Structural Adequacy

The ability of the building element to support the weight of adjacent building elements.

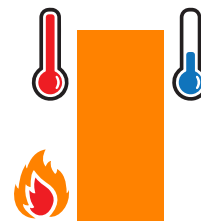
ie: a brick wall supporting a concrete floor slab above.



Integrity

The ability of an element to prevent the passage of flames and hot gasses.

ie: a plasterboard wall remaining intact and not allowing holes to form.



Insulation

The ability of an element to resist heat transfer from the exposed face to the unexposed face.

ie: a bundle of cables remaining below a set temperature limit on the unexposed side of the wall penetration system.

Penetrations are not required to have a Structural Adequacy rating and is usually expressed as a dash. For example, a penetration through a 4-hour load bearing wall would be written as -/240/240.

INTEGRITY

The BLADERUNNER system will achieve the integrity performance for up to 4 hours physically stopping the direct spread of fire, however the insulation performance of the penetration will be limited to the type of floor being used and conductivity of the services in the penetration.

INSULATION (TEMPERATURE RISE)

Heat transfer via conduction (or heat rise) can be limited through retrofit collar systems however the plastic pipe services are not thermally conductive, and the BLADERUNNER can effectively close the pipe quick enough to reduce heat to transfer through the penetration and do not require additional wrapping or treatment for heat rise for up to 240 minutes.

COMPLIANCE

BladeRUNNER: PIPES



The BLADERUNNER has been tested in a floor waste application where there was no cast-in collar previously installed, proving that the innovative design will work without relying on the presence of any cast-in collar above it. This test design was considered as being the worst, most onerous case where the blade mechanism must shut the pipe and rely solely on its own pre-loaded intumescent material to tightly seal the penetration for up to 4 hours (-/240/240). Testing in this orientation proves that the BLADERUNNER will work with or without the presence of a cast-in collar in the slab, and is suitable to upgrade non-compliant penetrations with or without cast-in collars.

PIPE (HDPE)	BladeRUNNER Size	Floor (minimum thickness)	Application	Elbow, Socket or trap?	FRL (up to)	Report
40	BladeRUNNER-MINI	150mm Concrete	Floor Waste	Yes	-/240/240	FSP 2415
PIPE (PVC)	BladeRUNNER Size	Floor (minimum thickness)	Application	Elbow, Socket or trap?	FRL (up to)	Report
40	BladeRUNNER-MINI	150mm Concrete	Floor Waste	-	-	-
			Stack (DWV)	Yes	-/240/240	FSP 2415
50			Floor Waste	Yes	-/240/240	TR001.3 0623 V3
			Stack (DWV)	Yes	-/120/120	RTLFT1881
65			Floor Waste	-	-	-
			Stack (DWV)	Yes	-/240/240	FSP 2415
80	BladeRUNNER-FW-100	150mm Concrete	Floor Waste	Yes	-/240/240	FSP 2415
			Stack (DWV)	Yes	-/90/90	FSP 2415
			Floor Waste	Yes	-/240/240	TR001.3 0623 V3
100			Stack (DWV)	Yes	-/120/120	RTLFT1881
100	BladeRUNNER-FW-100	90mm CLT Viridi Timber Strongfloor	Floor Waste	No	-/120/120	FAS210390

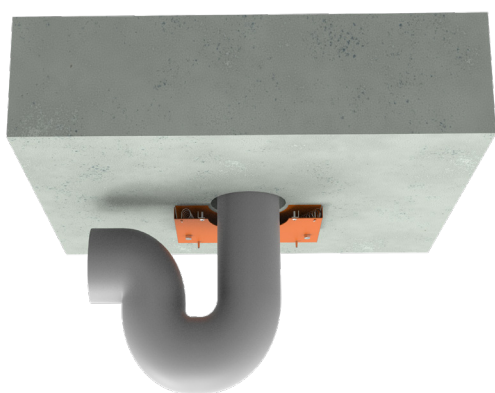


INSTALLATION

BLADERUNNER



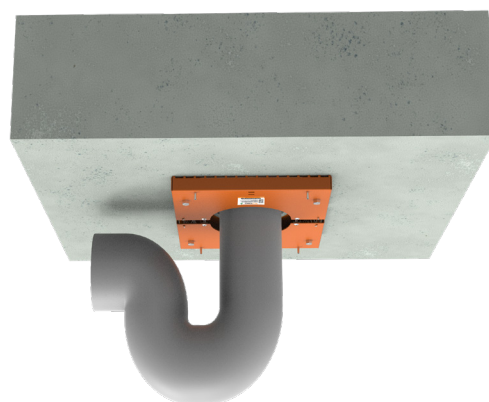
PREPARE & FIX



Place one half of the BladeRUNNER correct side up with sticker exposed and visible, to the slab with the pipe between one half. Secure in the two holes in the BLADERUNNER using min. M6 x 50 masonry anchors. Care is to be taken not to overtighten the ancors. No sealant is required.



PREPARE & FIX



Place remaining half of the BladeRUNNER correct side up, with sticker exposed and visible, to the slab with the pipe between one half. Secure in the two holes in the BLADERUNNER using min. M6 x 50 masonry anchors. Care is to be taken not to overtighten the ancors. No sealant is required.

For any assistance regarding application and installation get in touch with technical@tgroup.com.au

SYSTEM RANGE



Item Nuber	Description	Min Order Qty	Box QTY	Box Dimensions LxWxH	Box Weight
FWR-B100	BLADERUNNER retrofit floor waste collar - to suit 80mm - 100mm pipes	1x	10x units	47 x 25 x 17cm	18Kg
WR-BMINI-50	BLADERUNNER MINI retrofit floor waste collar- to suit 40mm - 65mm pipes	1x	10x units	47 x 25 x 17cm	16Kg





SOCIAL MEDIA



FAQ

Q Does it matter what collar was cast in previously?

A No, the BLADERUNNER retrofit floor waste collar can be applied over existed casted in collars as long as installed as per the installation instructions.

Q Can I use this on services other than PVC?

A The BladeRUNNER & BladeRUNNER Mini systems are approved for a range of plastic services in concrete floor slabs, in both stack and floor waste applications. Check the system approvals for the specific materials and sizes.

Q Do I need sealant to install this collar?

A No, the BLADERUNNER does not require any sealant as part of the tested system.

Q Can I use the BladeRUNNER on a Floor Waste pipe that does not have a cast-in collar?

A Yes, the BLADERUNNER has been tested directly on a concrete slab without any cast-in collar above it.

Q Can I use the BladeRUNNER with timber floor system?

A Yes, the BladeRUNNER has been tested with a 100mm PVC floor waste pipe with an FRL of -/120/120. Contact Trafalgar or Viridi Group for more information

Q Can fittings be located inside the BladeRUNNER?

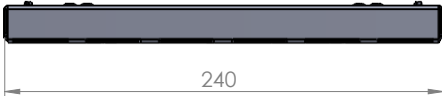
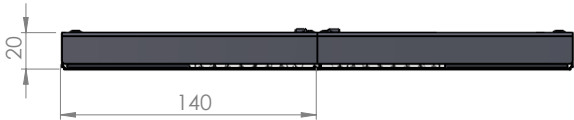
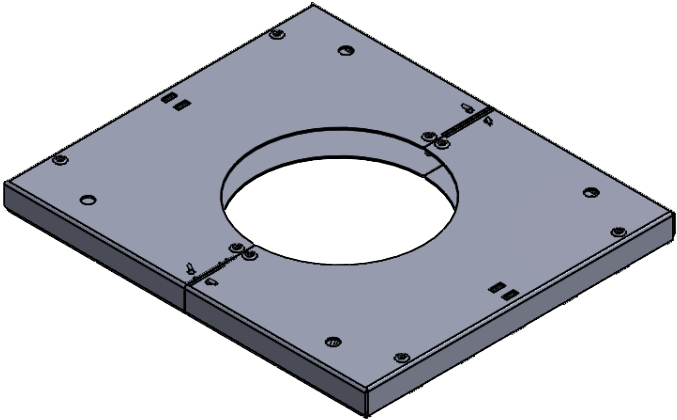
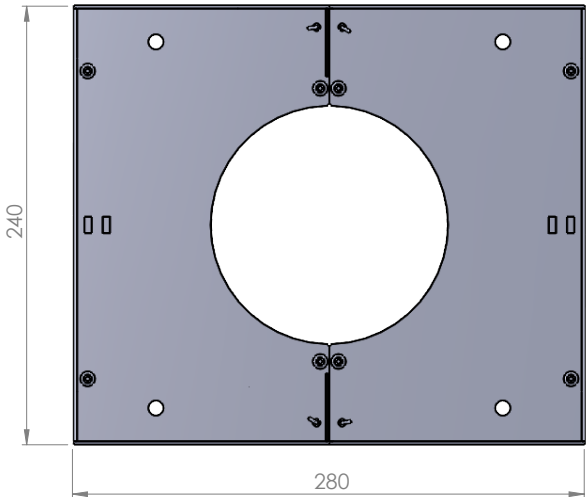
A Yes, The BLADERUNNER has been tested with a P-traps, 4-way risers and elbows located inside of the collar as well as outside of it. More testing is in progress - Contact Technical Team for more information.




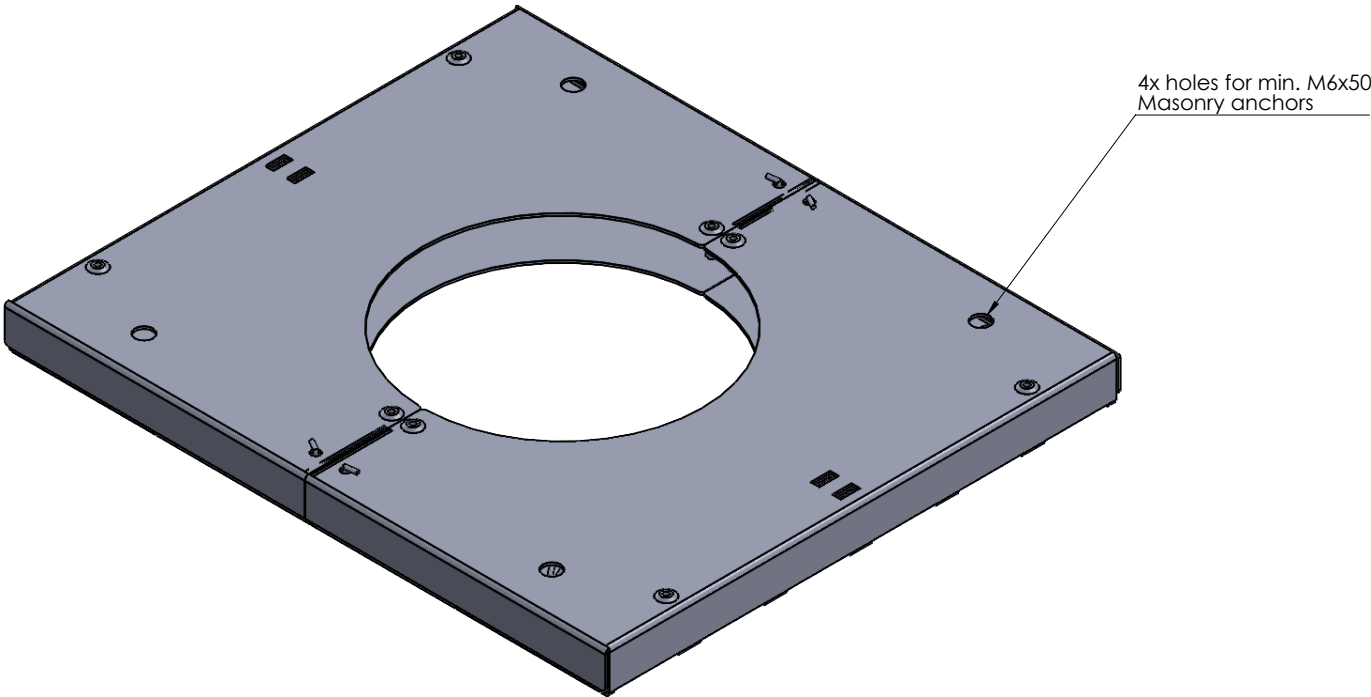
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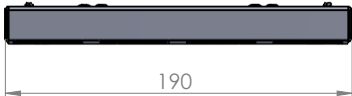
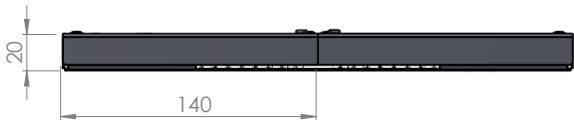
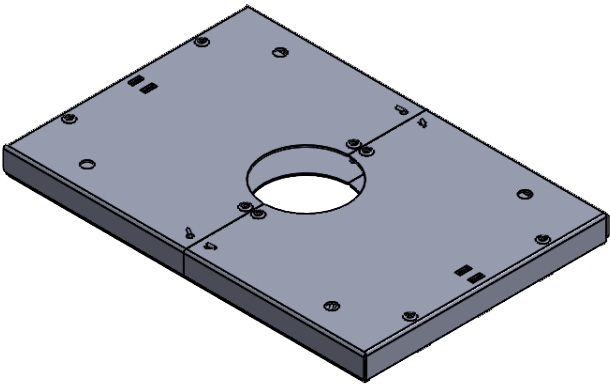
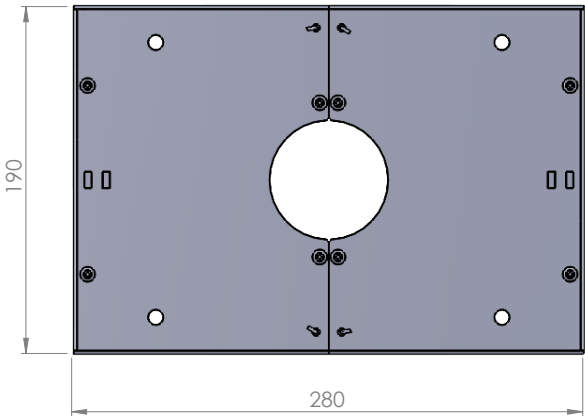



Drawing Name: BladeRUNNER assembly				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: BladeRUNNER Tech guide				Fire resistance level:	Drawn By: MP				NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)
Drawing No. : 1	Sheet: 1 of 2	Date: 25/01/2023	Scale: NTS	Based on Report No.:	Checked By: JH	<input type="checkbox"/> STANDARD DRAWING <input type="checkbox"/> PROJECT DRAWING	<div>TRAFALGAR FIRE</div> <div>Trafalgar Head Office: PO BOX 545 Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: technical@tgroup.com.au W: www.tfire.com.au</div>		

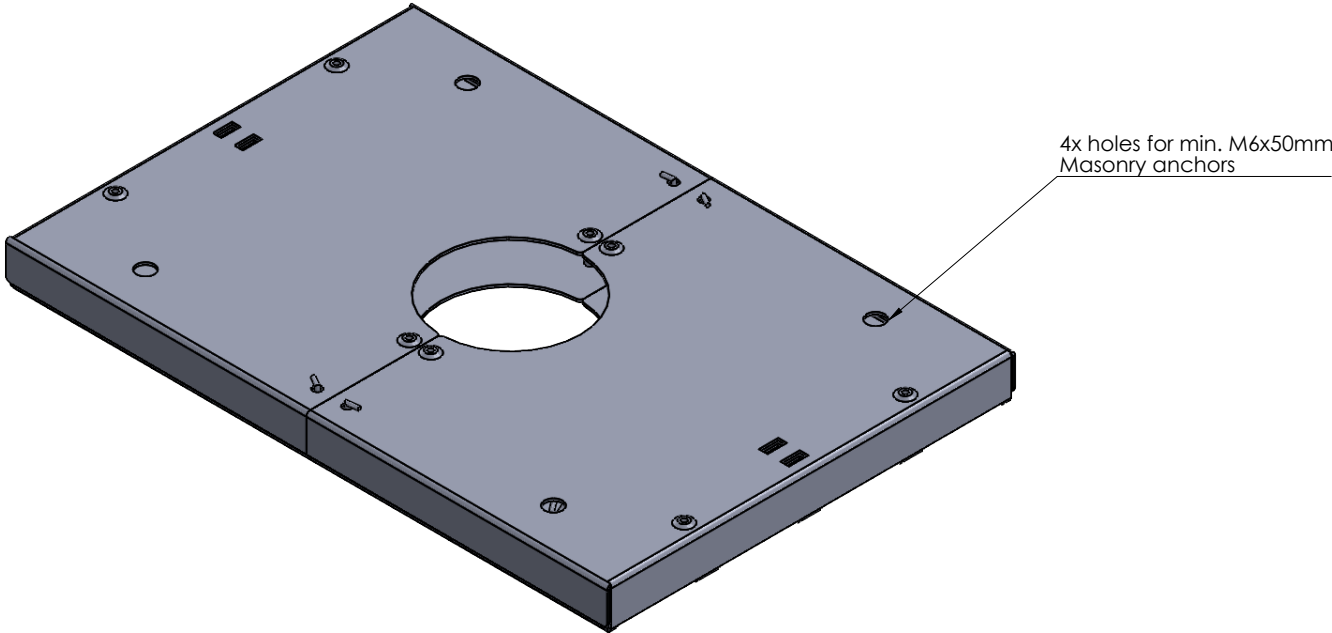



Drawing Name: BladeRUNNER anchor details				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
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Drawing Name: BladeRUNNER MINI assembly				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: BladeRUNNER 63mm_Tech guide				Fire resistance level:	Drawn By: MP	<div>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm).</div> <div>TRAFALGAR FIRE</div> <div>Trafalgar Head Office: PO BOX 545 Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: technical@tgroup.com.au W: www.tfire.com.au</div>			
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Drawing Name: BladeRUNNER MINI anchor detail				Test Standard: AS1530.4	Codes:	Revision:	Date:	No.:	NOTICE:
Project Title: BladeRUNNER 63mm_Tech guide				Fire resistance level:	Drawn By: MP				<small>NOTE: ALL DIMENSIONS ARE IN MILLIMETRES (mm)</small>  Trafalgar Head Office: PO BOX 545 Chester Hill NSW 2162 T: 1800 888 714 F: 1800 201 500 E: technical@tgroup.com.au W: www.tfire.com.au
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