



### GENERAL PRODUCT DESCRIPTION

Protecta® FR Graphite Plate is a preformed self-adhesive intumescent plate, used to reinstate the fire resistance performance of flexible wall constructions when punctured with plastic wall boxes. It is used where the walls have been provided with apertures for the penetration of conduits and cables into socket boxes, on one or both sides of the wall.

The graphite plate immediately reacts to fire through the heat and automatically expands and fills up the box, preventing fire from passing through.

Fitting Protecta® FR Graphite Plate will reinstate the fire resistance performance of flexible wall constructions for up to 120 minutes. It also prevents the passage of fire through the electrical conduits between socket boxes.

### PROPERTIES

- Wall boxes can be fitted back to back
- Boxes can be fitted to steel and timber noggins
- Up to 120 minutes of both integrity and insulation resistance
- Quick and easy to install
- For flexible walls with a minimum thickness of 75 mm
- Can be used on insulated and uninsulated walls
- Tested with a wide range of cables and conduits interconnected between boxes
- Tested with empty conduits between boxes for future cable transits
- High end fast expanding patented graphite material
- No emissions - environmentally and user friendly
- Unlimited storage time (under correct conditions)
- 50 years working life

### SOUND INSULATION

Description	Sound reduction
Graphite Plates for sockets, single sided in drywalls	Rw 69 dB
Graphite Plates for sockets, double sided in drywalls	Rw 68 dB

Protecta® FR Graphite Plate has been tested at WarringtonFire (UKAS accredited); according to EN ISO 10140-2. The test report is available upon request.

### GENERAL GUIDE

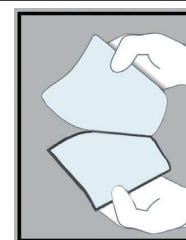
**Minimum separations and limitations:** Socket boxes can be fitted back to back or side by side – one fitted to each face, and may also be used in the situation where a socket box penetrates one side of the wall only and the remaining side of the wall is not penetrated at the same point (i.e. the services continues on the inside of the wall). Socket boxes can be placed with zero distance, or further apart.

**Supporting constructions:** Flexible walls must have a minimum thickness of 75 mm and comprise studs lined on both faces with minimum 1 layer of 12.5 mm thick boards. The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.



### INSTALLATION

1. Wall boxes should be installed according to the Manufacturer's Instructions, and can be fixed directly to drywall studs, or to timber noggins or steel plates fixed to studs
2. The aperture around the wall box should be as tightly fitting as possible and any gaps filled with plaster filler, or Protecta® FR Acrylic.
3. Before installing Protecta® FR Graphite Plate ensure that the surfaces are clean and sound, free from dirt, grease and other contamination.
4. Remove the backing paper from the back of the pad.
5. Fit into place inside at the base of the socket box.
6. The pad must not obstruct cable entry.



### TEST STANDARDS

This Technical Data Sheet and the Installation Instructions are based on the product's European Technical Assessment issued in accordance with regulation (EU) No 305/2011 on the basis of EAD 350454-00-1104, September 2017, tested to EN 1366-3 in conjunction with EN 1363-1. The product hold the following approval marks; CE-mark for Europe.



### FIRE CLASSIFICATION - TABLE

Socket Box	Graphite Plate	Class
<b>FLEXIBLE WALL CONSTRUCTIONS ≥ 75MM</b>		
ELKO 3012 S57/100 standard box	Square 45 x 45mm	E 60 EI 45
UK standard socket boxes up to 145mm wide x 85mm high x 35mm deep	Square 110 x 60mm	EI 30
<b>FLEXIBLE WALL CONSTRUCTIONS ≥ 100MM</b>		
ABB AU60.1 2TKA001744G1/122008 connection box	Square 45 x 45mm	EI 60
ELKO 45/Stud 6-conduits standard box	Circular Ø 59mm	EI 60
ELKO 3011 connection box	2no. plates 55 x 45mm	EI 60
ELKO 3012 S57/100 standard box	Square 45 x 45mm	EI 60
ELKO 4038 connection box	Square 30 x 30mm	EI 90
ELKO 4040 connection box	Square 45 x 45mm	EI 60
ELKO 4045 connection box	Square 45 x 60mm	EI 60
ELKO 4202 connection box <sup>1)</sup>	Square 45 x 45mm	EI 60
ELKO 4206 connection box <sup>1)</sup>	Square 45 x 45mm	EI 60
ELKO 4545 connection box	8no. plates 20 x 35mm	EI 45
ELKO 5228 connection box <sup>2)</sup>	Circular Ø 59mm	EI 60
ETMAN ETM001S connection box	Square 45 x 45mm	EI 60
ETMAN ETM220S multi- connection box	3no. plates 20 x 40mm, lining the back and sides	EI 60
ETMAN ETM337S connection box	Square 45 x 45mm	EI 45
ETMAN ETM338S connection box	Square 50 x 45mm	EI 45
ETMAN ETM394S junction box	2no. plates 50 x 70mm	EI 60
ETMAN ETM395S junction box	Square 50 x 70mm	EI 60
ETMAN ETM546S multibox	4no. plates 20 x 40mm, fitted lining the sides	E 90 EI 45
ETMAN ETM548S multi- connection box	Square 50 x 40mm	EI 30
ETMAN ETM611S flush mounting box	2no. plates 40 x 110mm	E 60 EI 45
ETMAN ETM611S double connection box	2no. plates 40 x 50mm	EI 45
ETMAN ETM614S connection box	Square 65 x 45mm	EI 45
ETMAN ETM616S connection box	Square 65 x 45mm	EI 45
ETMAN ETM663S connection box	Square 40 x 110mm	EI 60
ETMAN ETM750S connection box	Square 50 x 40mm	EI 60
ETMAN ETM751S connection box	Square 50 x 40mm	EI 60

Socket Box	Graphite Plate	Class
FUGA Forfradåse 1M	4no. plates 25 x 15 mm and 1no. 25 x 7 mm	EI 120
FUGA Air Forfradåse 1M	4no. plates 25 x 15 mm and 1no. 20 x 20 mm	EI 90
RUTAB 3 connection/junction box	Special shape Ø 65mm	E 120 EI 90
RUTAB 8 connection/junction box	Square 57 x 74mm	EI 90
SCHNEIDER Electric 55/94 2-conduits connection box	2no. plates 55 x 45mm	EI 60
SCHNEIDER Electric 60/46 connection box	5no. plates 20 x 50mm	E 90 EI 45
SCHNEIDER Electric IMT 36006 connection box	Square 45 x 45mm	EI 60
SCHNEIDER Electric IMT 36016 connection box	Square 45 x 45mm	EI 60
SCHNEIDER Electric IMT 36029 connection box	Square 45 x 60mm	EI 60
SCHNEIDER Electric IMT 36030 connection box	8no. plates 20 x 35mm	EI 30
SCHNEIDER Electric IMT 36190 connection box	Square 30 x 30mm	EI 120
SCHNEIDER Electric IMT 36192 connection box	Square 45 x 45mm	EI 60
SCHNEIDER Electric IMT 36193 connection box	Square 45 x 45mm	EI 45
SCHNEIDER Electric IMT 36200 connection box	Square 45 x 45mm	EI 60
SCHNEIDER Electric IMT 36205 connection box	2no. plates 55 x 45mm	EI 60
SCHNEIDER Electric IMT 36256 TED A26 connection box	Square 45 x 45mm	EI 90
SCHNEIDER Electric IMT 36263 TED26 connection box	Square 66 x 52mm	EI 90
SCHNEIDER Electric IMT 36316 connection box	3no. plates: 44 x 25mm + 40 x 12mm + 40 x 9mm	E 90 EI 60
SCHNEIDER Electric IMT 36356 connection box	Square 45 x 45mm	EI 60
UK standard socket boxes up to 134mm wide x 74mm high x 48mm deep	Square 110 x 60mm	EI 120

<sup>1)</sup> Box not tested separately because the design is the same as ELKO 3012.

<sup>2)</sup> Box not tested separately because the design is the same as ELKO 45/6.

### TECHNICAL DATA

Technical Approval	EAD 350454-00-1104
Fire Test - EM13501-2	EI 30 - 120
Durability - ISO 8339	Z <sub>2</sub> intended for use in internal conditions with humidity classes other than Z <sub>1</sub> , excluding temperatures below 0 °C
Conditioning procedure	EN 13238:2010
Expansion ratio	17:1
Expansion pressure	65.4 N
Colour	Light Grey with silver flecks
Texture	Textured surface
Finish	Matt finish on one side, other side satin finish
Thickness	Approximately 3.8mm
Weight per unit area / length	5.1 Kg/m <sup>2</sup>
Density	1,409 Kg/m <sup>3</sup>
Optimum expansion time	2 minutes
Optimum expansion temp.	550 °C
Usage	Supplied ready to fit
Packaging	Supplied packed in boxes, normally 10 plates/box
Storage	Store in temperatures between 5 °C and 30 °C
Life	Under normal conditions; 50 years +