



### 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.

### BENEFITS

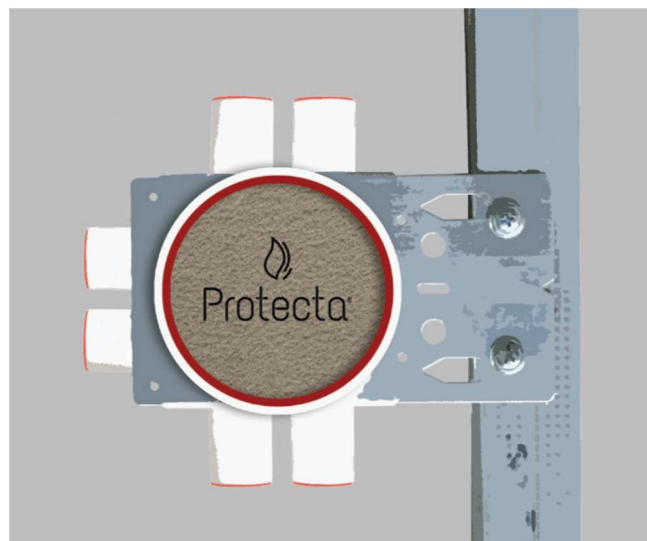
- Wall boxes can be fitted back to back.
- Up to 120 minutes of both integrity and insulation resistance.
- Quick and easy to install.
- For flexible walls with a minimum thickness of 75 mm.
- Can be used on insulated and uninsulated walls.
- Tested with a wide range of cables and conduits interconnected between boxes.
- Tested with empty conduits between boxes for future cable transits.

### GENERAL GUIDE

**Minimum separations and limitations:** Socket boxes can be fitted back to back or side by side – one fitted to each face. Minimum separation between socket boxes on one side of the wall should be at least 30 mm.

**Supporting constructions:** Flexible walls must have a minimum thickness of 75 mm and comprise steel studs or timber 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.

\*) Timber studs: no part of the penetration seal may be closer than 100 mm to a stud, and minimum 100 mm of insulation of class A1 or A2 according to EN 13501-1 must be provided within the cavity between the penetration seal and the stud.



### INSTALLATION

1. Wall boxes should be installed according to the Manufacturer's Instructions.
2. The aperture around the wall box should be as tightly fitting as possible and any gaps filled with plaster filler.
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 is 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.

# PROTECTA® FR GRAPHITE PLATE

## TECHNICAL DATA SHEET



### 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
FUGA Forfrådase 1M	4no. plates 25 x 15 mm and 1no. 25 x 7 mm	EI 120
FUGA Air Forfrådase 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

Socket Box	Graphite Plate	Class
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

<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	ETAG 026-2
Fire Test - EN13501-2	EI 30 - 120
Durability - ETAG 026-2	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, normally one plate is required per electrical socket box
Packaging	Supplied packed in boxes, normally 10 plates per box
Storage	Store in temperatures between 5 °C and 30 °C
Life	Under normal conditions; 50 years +