

## TG-FR™ 30/10 Technical Data Sheet

Product Name	TG-FR™ 30/10		
Testing Authority / Date	EXOVA WARRINGTONFIRE / 05 November 2018		
Report Ref / Report Summary	WF 398189 Rev A in accordance with BS 476: Part 20/22: 1987 Method 10		
Fire Resistance Integrity (E) Level	E30	Protection from Flames & Hot Gases for 30min	
Fire Resistant Radiation (E <sub>w</sub> ) Level	E <sub>w</sub> 15	Radiant Heat Transfer ≤ 15 kW/m <sup>2</sup> for 26min	
Fire Resistance Insulation (I) Level	EI07	Protection from Flames, Hot Gases & Radiated Heat for 7min	
Installation Location / Frame	Internal and External / Steel		
Thickness	10mm +/- 0.2mm		
Weight	25 Kg/m <sup>2</sup>		
Acoustic Rating	34 Rw (dB)		
Available in IGU's	Yes, TG-FR™ 30/10 / 8mm – 16mm Spacer / ≥4mm any glass type		
Available in Lamination Constructs	Yes, TG-FR™ 30/10 / 0.76mm – 1.52mm PVB/TG-WR / ≥4mm any glass ty		
Available in Shapes	No		
Multi Directional for Fire Resistance	Yes		
Quality Management System	ISO 9001 2015	(Environmental ISO14001 is being considered)	
EN 12150-1:2000	Pass, Certificate # KM 52134		
EN 12600 Impact Rating	1(C)1		
EN 356 Manual Attack Rating	Not Applicable		
LPS 1270 Intruder Resistance Rating	Not Applicable		
EN 1063 Bullet Attack Rating	Not Applicable		
ISO 16933:2007 Blast Resistance Rating	Not Applicable		
Angled Glazing	Vertical / Horizontal	(Vertical includes +/- 10° from Vertical)	
Application	Framed Steel Screens	(Windows, Partitions, Viewing Panels, etc.)	
Steel Screens (*Including IGU's)	Max Vertical Size (mm)	Max Horizontal Size (mm)	Max Area (m <sup>2</sup> )
	1230 x 2890	*2311 x 1538	3.554

\*These values are determined by calculations based on mathematical and/or physical and/or thermodynamic equations and are not being tested or supported by an independent authority. As such it must be taken as a general description of the product and ToughGlaze (UK) Ltd hereby disclaims all liability arising from any inaccuracy in or omission from this publication and all consequences of relying on it.

## Frame – Forster Presto Profiles Systems Ltd

	Material	Dimensions (mm)
Head, jambs and threshold (see drawings in Appendix)	Forster Presto reference 32.851 profiled steel 1.5mm thick	70 wide x 50 deep including a 20 high integral bead on the unexposed face
Mullions (see drawings in Appendix)	Forster Presto reference 32.851 profiled steel 1.5mm thick	90 wide x 50 deep including 20 high integral beads on the unexposed
Joining Method	Spigot jointed and welded	-
Frame to supporting construction fire stopping detail	Tightly packed rock mineral wool capped with intumescent mastic on head, threshold and right edge	15 wide x 10 deep
Frame to supporting construction fixing detail	7 No. steel screws in the right jamb, 7 No. steel screws along head and threshold. 3 No. 5mm thick steel packers at the fixing points. The left edge remains free. The gap between the frame and restraint frame on the free edge to be sealed with Kerafix ceramic wool	7.5 $\phi$ x 150mm long at between 350mm – 450mm centres, 200mm from the corners
Architrave	None Fitted	

## Intumescent and Sealing Materials

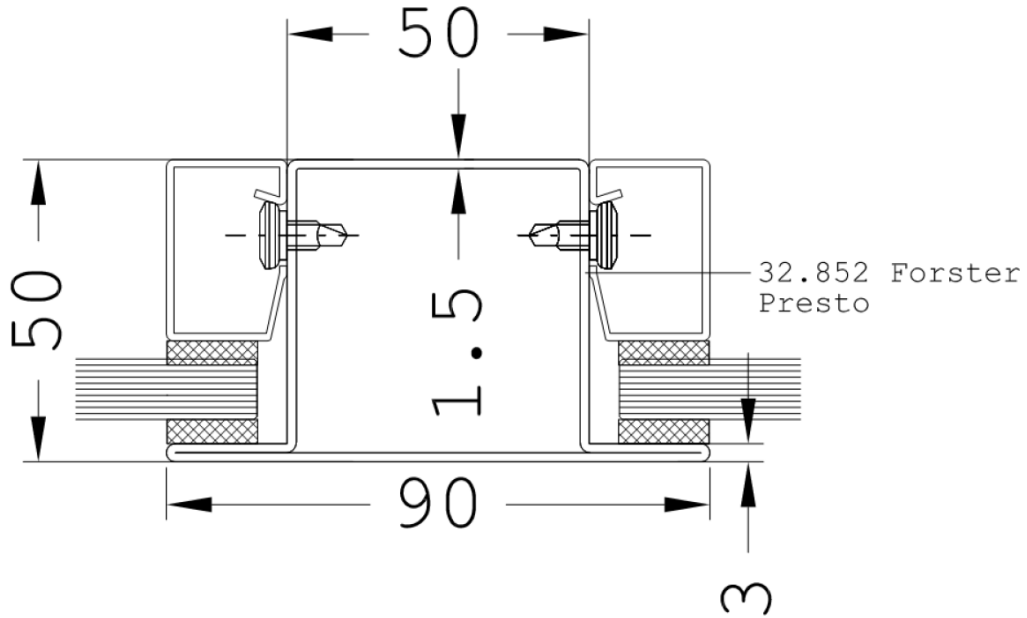
	Make / Type	Size (mm)	Location
Glazing perimeter (see drawings in Appendix)	Intumescent Seals Ltd ISL60 Plus	15 x 4	Fitted between the glass and bead on both faces

## Glazing – All Apertures

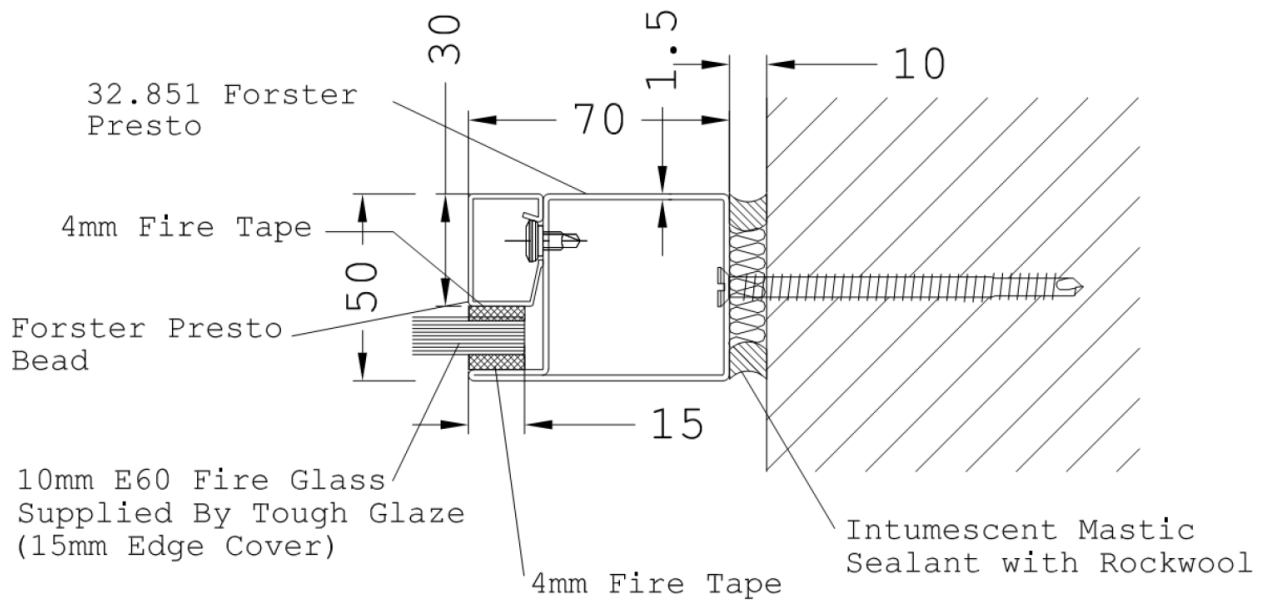
	Make / Type	Size (mm)
Beading – All Apertures	Referenced as part of the Forster Presto jamb/mullion systems 32.851 and 32.852. Profiled steel – fitted on the exposed face	20 high x 30 deep x 1.5 thick
Beading fixings (see drawings in Appendix)	Beads clip on over mushroom head steel screws	14.5mm long fitted 70mm from corners at 300mm centres

\*The customer/end user is/are fully responsible to make certain that the fire resistant glass and frame(s) are fully compatible and according to the application and glazing requirements.

Appendix



Mullion Detail



Jamb Detail

Tuesday, February 12, 2019

General Customer Files  
 Technical Department  
 Territory: UK  
 Subject: TG-FR™ 30/10, 10mm thick Acoustic Performance and Data

Dear Customer,

The acoustic performance data within this document is determined by calculation, based on factors derived from certified data. Due to inherent variations in acoustic performance when testing in accordance with EN ISO 140-3, some variation in the calculated performance can also be expected. As such, the weighted performance,  $R_w$ , and adaptation terms, C and Ctr, should typically be considered to be accurate within  $\pm 2$  dB. However, wider deviation can occur.

10 mm Nominal (10mm TG-FR™ 30/10)

Glass Weight  $\approx 25$  Kg/m<sup>2</sup>  
 Unit thickness  $\approx 10$  mm  $\pm 0.2$

Sound Reduction Indices – dB

$R_w + C_{tr}$  (dB) = 32

$R_w$  = 34

Octave Centre Frequency Performance						Glass / Unit Performance				
Frequency – Hertz						$R_w(C:C_{tr})$	C	Ctr	OITC	STC
125	250	500	1000	2000	4000					
28	28	32	34	36	44	34	-1	-2	32	34

Iman Esmaeili  
 Technical Manager  
 ToughGlaze (UK) Ltd

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**C.E. DECLARATION OF CONFORMITY**

**No 52134**

**C.E. CONSTRUCTION PRODUCT REGULATION 2011**

We hereby certify that the glass as stipulated below complies with the relevant provisions of the E.C. construction product regulation & the requirement of:

**BSEN 12150**

**BSEN 12600**

**BSEN 12543**

The product as detailed has not dangerous substances, however care should be taken when handling non-toughened product.

All product must be glazed in accordance with BS 6262 – 4 2018, failure to comply with these requirements will render all warranties void.



Signed:

Mr. Bhavik Varsani

On behalf of Toughglaze UK Ltd