

## ***INDIGATECH CERTIFICATION SCHEDULE***

for

### **FORSTER INSULATED GLAZED DOORS & SCREENS UTILISING FUEGO LITE 60 COMPONENTS WITH A RANGE OF EI30 & EI60 GLASS TYPES**

This Schedule should be read in conjunction with Certificate No. **IFCC/1087**

**1. The following door and screen configurations are approved:**

- Double-leaf, single-action doors
- Single-leaf, double-action doors
- Glazed screen/partitions
- Doors incorporated within continuous glazed screen/partitions

**2. The following options are approved for the above configurations**

- i) Forster Fuego Lite series mild steel profiles
- ii) All fully glazed using the glass types referred to in Sections 4 to 6 of this Schedule
- iii) Options of single-glazing and double-glazing glass
- iv) Size variations for both doors and screens with regard to 30 & 60 minute integrity and insulation requirements in accordance with BS 476: Part 22: 1987, EN 1364-1:1999 and EN 1634-1:2000.



**Bob Williams**  
**Director, IFC Certification**



**23 June 2013**

The certificate and schedule are held in force by regular annual surveillance visits by IFC Certification and the reader or user should contact IFC Certification to validate its status. This certificate remains the property of IFC Certification and must be returned to them on demand.

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**3. Forster Fuego Lite profiles, door hardware and edge seals approved for glazed doors and screens**

All Forster Fuego Lite profiles are manufactured from 1.5mm thick folded mild steel and are 50mm deep with clip-on beading.

**3.1 Forster Fuego Lite 60 Series profile types**

Series 60 Code	Section Type	Specification
736.850	Steel Frame	65 x 50mm (d x w) no flanges
736.851	Steel Frame	65 x 50mm (d x w) single flange
736.852	Steel Frame	65 x 50mm (d x w) double flange
736.853	Steel Frame	65 x 50mm (d x w) alternate flanges
736.800	Steel Frame	65 x 50mm grooved single flange
736.803	Steel Frame	65 x 50mm grooved double flange
736.805	Steel Frame	65 x 50mm grooved alternate flanges
736.803T	Steel Frame	65 x 50mm grv/hole double flanges
736.805T	Steel Frame	65 x 50mm grv/hole alternate flanges
901228	Glazing bead	20 x 25mm (w x h)
901226	Glazing bead	20 x 15mm (w x h)
901246	Glazing bead	20 x 30mm (w x h)
901245	Glazing bead	20 x 25mm (w x h)
901241	Glazing bead	20 x 10mm (w x h)
901577	Glazing bead stud	Ø = 3.5mm
901421	Glazing bead stud	Ø = 3.5mm
948002	Intumescent steel	24.5 x 2.2 (w x thk)

Refer to Figures 01 to 02 for details of the profiles used for doors and screens.

All glazing beads are folded from 1.5mm thick mild or stainless steel into 20mm wide glazing beads. The glazing beads clip on to 901421 or 901577 studs inserted into the steel profiles at maximum fixing centres of 450mm.

Figure 02 shows location and stud attachment system for the glazing beads.

### **3.2 Door leaf assembly and seal system**

The steel profiles comprising the door leaf framing are cold-formed and incorporate 20mm wide flanges. These flanges either provide one side of the glazing pockets or form the door leaf stop. The glass panes are retained by glazing beads are clipped onto the studs inserted into the steel frame profiles with the glass edges protected on both faces by 948002 intumescent strips adhered to the inner flange and beading faces. The door leaf sub-frame profiles are welded together at the corners.

These doorsets are installed on floor spring closers, and are unlatched with an intumescent seal system used to seal the doorleafs if exposed to a fully developed fire.

Details of a typical door leaf assembly are shown in Figure 02.

### **3.3 Screen assembly**

The steel profiles comprising the glazed screen/partition framing are cold-formed and incorporate 20mm wide flanges which form one side of the glazing pockets. The glass panes are retained by glazing beads are clipped onto the studs inserted into the steel frame profiles with the glass edges protected on both faces by 948002 intumescent strips adhered to the inner flange and beading faces. The glazed screen profiles are welded together at the corners.

Details of a typical screen assembly are shown in Figures 01.

### **3.4 Installation and supporting construction**

The glazed doorsets and screens/partitions may be fastened directly to the floor, structural soffit and a rigid supporting construction, e.g. concrete, blockwork or masonry. Door leaves may also be incorporated with side panels and/or overpanels of the construction referred to in 3.3, form a glazed doorset within a continuous run of glazed partitioning, or be installed abutting other doorsets of the same type.

Frame fastenings which are suitable for the construction substrate (e.g. expanding anchor bolts for concrete) should be used, with maximum fixing centres of 450mm.

### **3.5 Door edge seals**

Door seal	:	Sealmaster IMP.
Door seal	:	Sealmaster N60S.

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### **3.6 Door closers**

Unlatched double-action: Floor spring closer: Dorma Door Controls Ltd.: BTS 75F  
Latched single-action: Overhead closer: Dorma TS 03 and G 93N guiderail.

### **3.7 Door hinges (hinged doors only)**

Steel hinges, Code 907662, dimensions 180mm long x 19.7mm diam. The hinges, as tested, are seam-welded to the door frame.

### **3.7 Door maximum clear opening sizes**

Single-leaf: width: 1290mm, height: 2700mm, doorset area: 3.5m<sup>2</sup>

Double-leaf: width: 2800mm, height: 2700mm, doorset area: 7.5m<sup>2</sup>

Unequal double-leaf: width: 2250mm, height: 2700mm, doorset area: 6.0m<sup>2</sup>

## **4. SGG/VETROTECH glass types approved for glazed doors and screens utilising Forster Fuego Lite components**

### **4.1 Glass types**

Contraflam: A 'multi-laminated' fully insulating glass, nominally 16mm thick for EI 30 and 25mm for EI 60.

*Note: Where a fully insulating fire resistant glass is installed, this will not provide an insulation performance at the frame members of the doors and screens.*

### **4.2 Glass configurations**

- Single glazed
- Double glazed

Where double glazed panes are installed the Vetrotech glass listed above must be on the non-fire face.

Where a fire resistance rating of 30 or 60 minutes is required, the appropriate Vetrotech glass should be installed.

### **4.3 Double-glazing**

All double-glazed panes have Vetrotech glass, 8mm steel spacer, and a suitable float glasses, which may be in a toughened or laminated form:

### **4.4 Approved glazing gaskets**

The glass perimeter edges are protected and sealed by the glass manufacturers recommended intumescent tape. The intumescent tape should be bonded to the sides of the glazing pocket to seal and protect the perimeter of the glass panes.

### **4.5 SGG/VETROTECH glass pane sizes**

The approved maximum VETROTECH glass pane sizes for doors and screens are tabulated in Section 7 of this Schedule.

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**7. Tables of glass pane sizes approved for Forster Fuego Lite screens and doors**

**7.1 Vetrotech glass pane sizes in accordance with EN 1364-1**

Glass/Rating	Fixed pane height (mm)	Fixed pane width (mm)
Contraflam 60	2896	1142

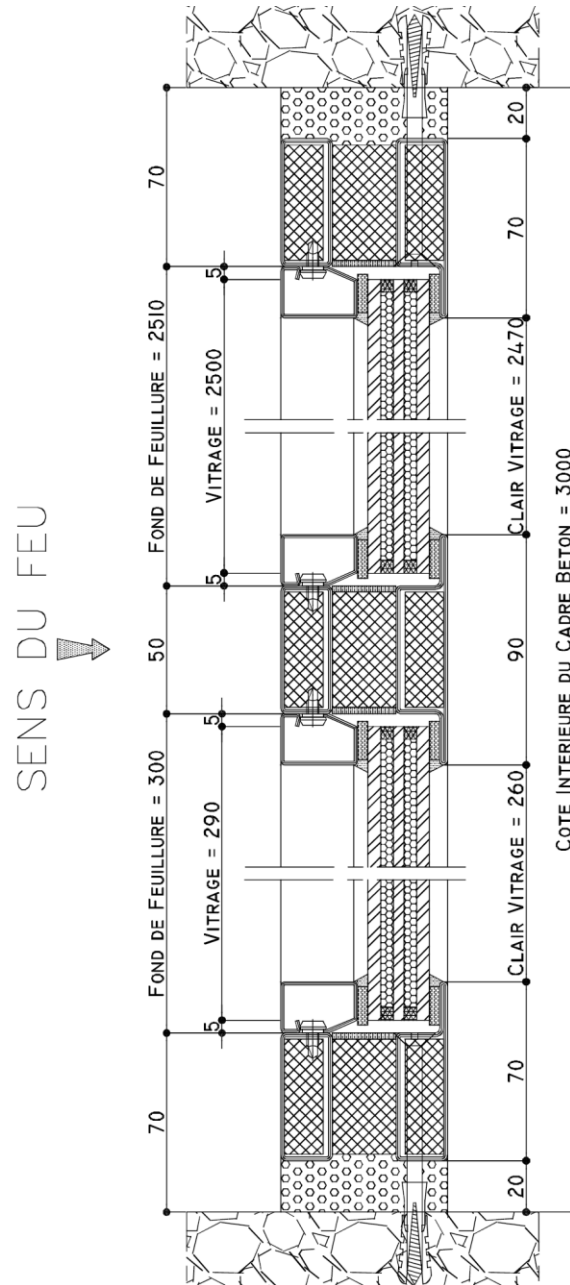
**Table 2: Range of Vetrotech glass sizes – fixed screen**

**7.2 Vetrotech glass pane sizes installed in doors**

Glass/Rating	Pane height (mm)	Pane width (mm)
Contraflam 60	2225	970

**Table 2: Range of Vetrotech glass sizes in door leaves**

**Figure 1: Typical horizontal section of a fully-glazed screen assembly using Forster Fuego Lite profiles**



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**Figure 2: Typical horizontal section of a double action meeting stile of a door assembly using Forster Fuego Lite profiles**

