

# **SPECIFICATION**

## **3. ACCUCEL WINDOW SHUTTER AND FRAME WITH SOLID uPVC EXTRUDED FOAM SECTION**

ACCUCEL is rigid PVC foam profile with a fine cellular structure having a smooth outer integral skin, which is homogeneous in character. ACCUCEL profiles are a perfect substitute for premium wood, which needs no maintenance at all. ACCUCEL profiles are characterized by excellent screw holding strength (>200 kgf) as per IS: 4020, shore hardness D of more than 70 and fire retardant grade I, which is self-extinguishing as certified by CIPET. Other inherent properties are like waterproof, termite proof, premium surface, easy to install, easy workability with normal carpentry tools, chemically resistant, light in weight etc. ACCUCEL solid PVC foam products combines this outstanding characteristic with total freedom of design in endless application in engineering / chemical industries, building and construction, architectural design and custom made products.

ACCUCEL Window frame and shutter should be waterproof, termite proof, elegant and should have excellent screw holding strength to fix hinges and hold doors properly for a long life

### **a. Openable Window shutters with single rebate frame FP 6030**

#### **Window Frame - FP6030**

ACCUCEL Window Frame (Single Rebate) shall be made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 60mm width & 30mm thickness and shall be fixed to wall as per instructions of engineer in charge using 100 x 8 sheet metal screws. Cover moulding 46mm x 15mm is provided for covering gaps between frame and wall (optional).

#### **Window Shutter- 28mm thick**

ACCUCEL Window shutter shall be made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 71mm width & 28mm thick as vertical & horizontal stiles. Joints are made using solvent adhesive and GI "C" sections (39mm x 19mm x 19mm x 0.6mm thick) stiffener or M. S. Pipe frame (40mm x 20mm x 19g) insert & telescopic polymeric "L" corners. Provision is made for 4mm thick glass infill fixed with the help of ACCUCEL beading element 12mm x 10mm. Normal hardware & fitting shall be fixed.

### **b. Openable Window shutters with double rebate frame FP 10042**

#### **Window Frame -FP10042**

ACCUCEL Window Frame (Double Rebate) shall be made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 100mm width & 42mm thickness with necessary stiffener frame and shall be fixed to wall as per instructions of engineer in charge using 100 x 8 sheet metal screws. Cover moulding 46mm x 15mm is provided for covering gaps between frame and wall (optional).

#### **Window Shutter- 28mm thick**

ACCUCEL Window shutter shall be made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 71mm width & 28mm thick as vertical & horizontal stiles. Joints are made using solvent adhesive and GI "C" sections (39mm x 19mm x 19mm x 0.6mm thick) stiffener or M. S. Pipe frame (40mm x 20mm x 19g) insert & telescopic polymeric "L" corners. Provision for 4mm thick high glass infill fixed with the help of ACCUCEL beading element 12mm x 10mm. Normal hardware & fitting shall be fixed.

### **c. Openable Window shutters with double rebate frame FP 10042 and flymesh shutters**

#### **Window Frame –FP10042**

ACCUCEL Window Frame (Double Rebate) shall be made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 100mm width & 42mm thickness with necessary stiffener frame and shall be fixed to wall as per instructions of engineer in charge using 100 x 8 sheet metal screws. Cover moulding 46mm x 15mm is provided for covering gaps between frame and wall (optional).

#### **Window Shutter -28mm Thick**

ACCUCEL Window shutter shall be made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 71mm width & 28mm thick as vertical & horizontal stiles. Joints are made using solvent adhesive and GI “C” sections (39mm x 19mm x 19mm x 0.6mm thick) stiffener or M. S. Pipe frame (40mm x 20mm x 19g) insert & telescopic polymeric “L” corners. Provision for 4mm thick high glass infill fixed with the help of ACCUCEL beading element 12mm x 10mm. Normal hardware & fitting shall be fixed.

#### **Fly-mesh Shutter -20mm Thick**

ACCUCEL Window fly mesh shutter shall be made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 45mm width & 20mm thick as vertical & horizontal stiles. Joints are made using solvent adhesive. Provision for SS fly mesh infill fixed with the help of SS staple pin with Pneumatic / Electrical machine and ACCUCEL beading element 12mm x 10mm.

### **d. Openable Window shutters with double rebate frame FP 13070**

#### **Window Frame –FP13070**

ACCUCEL Window Frame (Double Rebate) shall be made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 130mm width & 70mm thickness with necessary GI ‘C’ stiffener frame and shall be fixed to wall as per instructions of engineer in charge using 100 x 8 sheet metal screws. Inbuilt Cover moulding is provided for covering gaps between frame and wall. ACCUCEL Window frame should be waterproof, termite proof, elegant and should have excellent screw holding strength to fix hinges and hold doors properly for a long life.

#### **Window Shutter -28mm Thick**

ACCUCEL Window shutter shall be made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 71mm width & 28mm thick as vertical & horizontal stiles. Joints are made using solvent adhesive and GI “C” sections (39mm x 19mm x 19mm x 0.6mm thick) stiffener or M. S. Pipe frame (40mm x 20mm x 19g) insert & telescopic polymeric “L” corners. Provision for 4mm thick high glass infill fixed with the help of ACCUCEL beading element 12mm x 10mm. Normal hardware & fitting shall be fixed.

## **e. Openable Window shutters with double rebate frame FP 13070 and flymesh shutters**

### **Window Frame –FP13070**

ACCUCEL Window Frame (Double Rebate) shall be made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 130mm width & 70mm thickness with necessary GI ‘C’ stiffener frame and shall be fixed to wall as per instructions of engineer in charge using 100 x 8 sheet metal screws. Inbuilt Cover moulding is provided for covering gaps between frame and wall. ACCUCEL Window frame should be waterproof, termite proof, elegant and should have excellent screw holding strength to fix hinges and hold doors properly for a long life.

### **Window Shutter -28mm Thick**

ACCUCEL Window shutter shall be made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 71mm width & 28mm thick as vertical & horizontal stiles. Joints are made using solvent adhesive and GI “C” sections (39mm x 19mm x 19mm x 0.6mm thick) stiffener or M. S. Pipe frame (40mm x 20mm x 19g) insert & telescopic polymeric “L” corners. Provision for 4mm thick high glass infill fixed with the help of ACCUCEL beading element 12mm x 10mm. Normal hardware & fitting shall be fixed.

### **Fly-mesh Shutter -28mm Thick**

ACCUCEL Window fly mesh shutter shall be made of solid PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 71mm width & 28mm thick as vertical & horizontal stiles. Joints are made using solvent adhesive and GI “C” sections (39mm x 19mm x 19mm x 0.6mm thick) stiffener or M. S. Pipe frame (40mm x 20mm x 19g) insert & telescopic polymeric “L” corners. Provision for S S fly mesh infill fixed with the help of SS staple pin with Pneumatic / Electrical machine and ACCUCEL beading element 12mm x 10mm.

## **f. Sliding Window shutters with Two Track frame**

3 ribbed sliding track section made of ACCUCEL solid u-PVC section FP 7143 is used to make the frame with GI ‘C’ section (25x 10x10x0.8mm) stiffeners as shown. Cover moulding FP 7114 is provided to cover masonry joints (optional).

Sliding shutter is made of ACCUCEL FP 7128 and FP 1210. FP 7128 cut into required sizes and joint with special adhesive and SCK screw to fix the infill glass (4mm plain) FP 1210 is act as beading element GI ‘C’ 40 x 20 x20 stiffener is provided for extra strength. Sliding track is fixed with wall using hold fast or expandable screws as per instruction of Engineer-in-charge.

2 sliding glazed shutters are provided with bottom nylon rollers for easy movements. Centre locking is provided to the glazed shutters. Specially designed interlocking with wolf eye strip is provided for air leakage sealing. Holes are provided for rainwater removal on outer side.

### **g. Sliding Window shutters with Three Track frame**

3 ribbed sliding track section made of ACCUCCEL solid u-PVC section FP 7143 is used to make the frame with GI 'C' section (25x 10x10x0.8mm) stiffeners as shown. Cover moulding FP 7114 is provided to cover masonry joints (optional).

Sliding shutter is made of ACCUCCEL FP 7128 and FP 1210. FP 7128 cut into required sizes and joint with special adhesive and SCK screw to fix the infill glass (4mm plain) FP 1210 is act as beading element GI 'C' 40 x 20 x20 stiffener is provided for extra strength. Sliding track is fixed with wall using hold fast or expandable screws as per instruction of Engineer-in-charge.

2 sliding glazed shutters and 1 sliding SS mosquito net shutter are provided with bottom nylon / metal rollers for easy movements. Centre locking is provided to the glazed shutters. Specially designed interlocking with wolf eye strip is provided for air leakage sealing. Holes are provided for rainwater removal on outer side.

### **h. Ventilator with Glass / ACCUCCEL Louvers FP 8811 with Mosquito flymesh Jali**

ACCUCCEL ventilator Frame (Single Rebate) shall be made of solid u\_PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 71mm width & 28mm thickness having provision to fix 4mm thick Glass strip / ACCUCCEL uPVC louvers section of size 88mm x 11mm thick as louvers and shall be fixed to wall as per instructions of engineer in charge using required sizes sheet metal screws. SS mosquito net fixed on the back side of louvers covered with molding 26mm wide x 8mm thk. ACCUCCEL ventilator should be waterproof, termite proof, elegant and should have excellent screw holding strength to fix hinges and hold doors properly for a long life.

Provision of mosquito net is made to prevent insect / lizard entry inside through ventilators.

### **i. Ventilator with Glass / ACCUCCEL Louvers FP 8811 with Mosquito flymesh Jali and with Fix Glass / Openable shutters**

ACCUCCEL ventilator Frame (Single Rebate) shall be made of solid u\_PVC foam profile with homogenous fine cellular structure having smooth outer integral skin having 71mm width & 28mm thickness having provision to fix ACCUCCEL u\_PVC louvers section of size 88mm x 11mm thick as louvers and shall be fixed to wall as per instructions of engineer in charge using required sizes sheet metal screws in the top-half and 4mm thk. Plain/frosted glass in the bottom half. SS mosquito net fixed on the back side of louvers covered with molding 26mm wide x 8mm thk. ACCUCCEL ventilator should be waterproof, termite proof, elegant and should have excellent screw holding strength to fix hinges and hold doors properly for a long life.

Provision of mosquito net is made to prevent insect / lizard entry inside through ventilators.