

FIXED SMOKE CURTAIN DRAFT CURTAIN

A Fixed Draft Smoke Curtain contains smoke and heat in the case of fire.

Per NFPA 92B, Draft curtains are generally used to channel or contain smoke that is attached to the underside of the ceiling and protrude a limited distance downward.

CODE COMPLIANCE:

NFPA 92 - Standard for Smoke Control Systems

NFPA 204 - Standard for Smoke and Heat Venting

NFPA 409 - Standard on Aircraft Hangars

Fire resistance

60 minutes

120 minutes

KEY FEATURES



Smoke tightness tests

Materials class: **A2-s1, d0**

ASTM D6413: Vertical Flame Resistance

ASTM E-84: Surface Flame Spread & Smoke Density Testing

ASTM F955: Molten Metal Splash Testing

1800°F Glass fabric with coating and stainless-steel inlay

PRODUCT DESCRIPTION

The purpose of a Draft Smoke Curtain is to contain the movement of heat and smoke within a building.

The Draft Curtain consists of several overlapping curtains attached together to provide a continuous run. They are connected together and to the building by means of clamps and angle pieces.

The installation angles and the clamping profiles are predrilled to accept rivets. The connecting pieces have a continuous predrilled hole pattern, enabling fast and easy assembly of the curtain fabric. The bottom bar has a loop to accommodate the weight.

The Draft Curtain system can be used to close off a scheme of movable smoke curtains position below it, by clamping directly onto the housing of the movable smoke curtain.

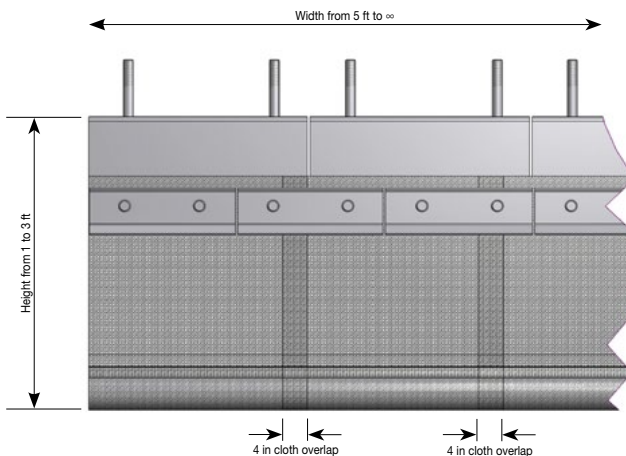
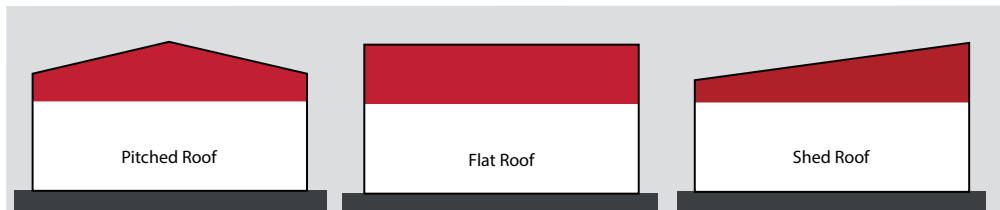
Fixing brackets, clamping profiles and bottom bars are all in galvanized steel.

The curtain overlaps can be attached to one another using a spray adhesive approved by MPA Stuttgart, which seals the flaps tightly to enhance the appearance of the surface of the curtain.

The system is fixed to the building with approved fasteners at intervals of a maximum of 5 feet.

THE CLOTH

This heat resistant fabric is designed for use in fire and smoke curtains, fire containment covers, and custom smoke and fire protection systems. When exposed to flame in these applications, the coating develops a protective high temperature silica layer that prevents flame penetration at temperatures up to 1800°F.

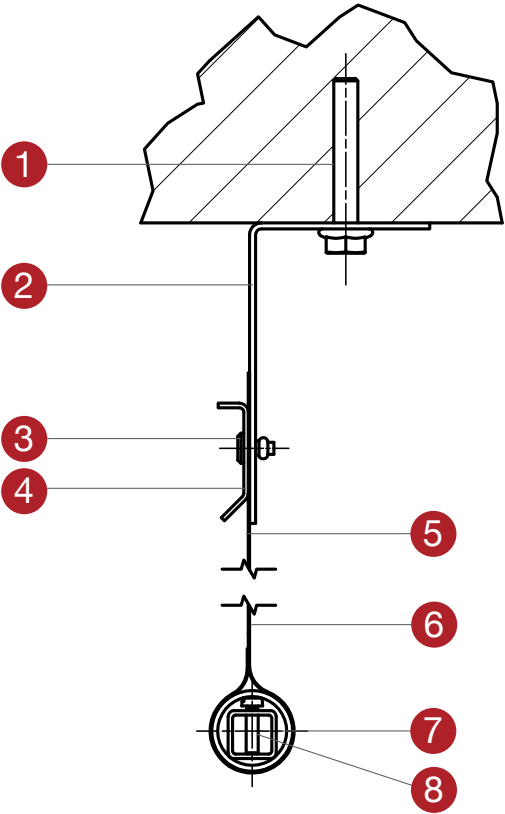
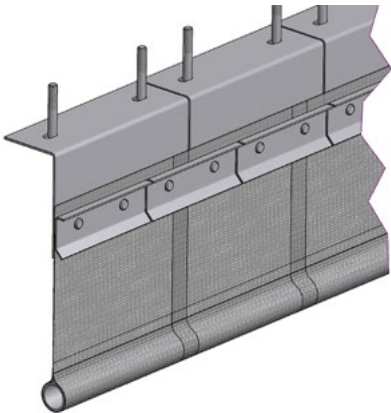
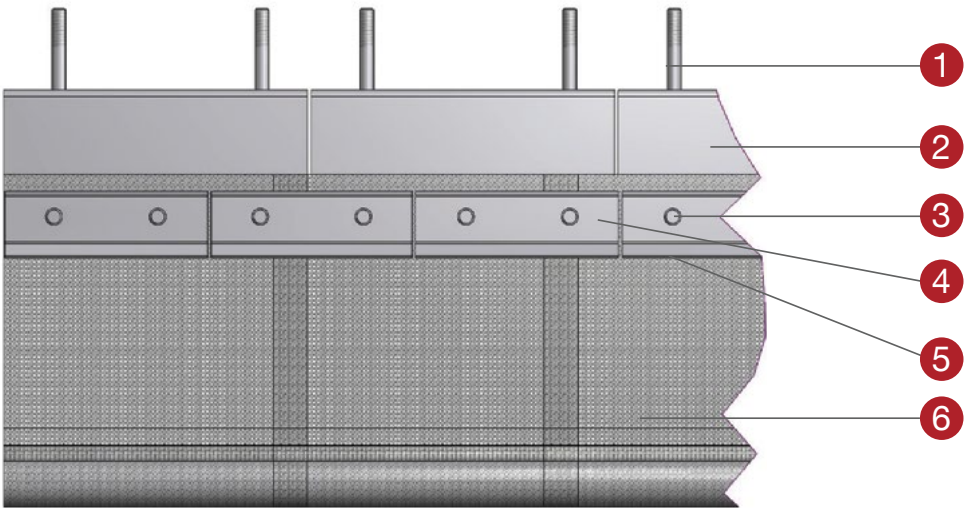


Lightweight compared to alternative materials such as steel sheeting.

BENEFITS:

- Assist the emergency services by containing or channelling the smoke into predetermined areas.
- Limit travel and overcooling of smoke, reducing the risk of cold smoke dropping to low level and obscuring vision.
- Its prefabricated metal sleeves allow penetrations to be made in various sizes and shapes.





- 1 Fixing Anchor
- 2 Angle Profile
- 3 Rivet
- 4 Clamp Profile
- 5 "Duo" adhesive tape
- 6 Smoke Curtain Cloth
- 7 Galvanized Steel Bar
- 8 Coupling Piece

Total System Weight:
From 3.4lb/ft to 5.8lb/ft depending on height

ANGLE PROFILE

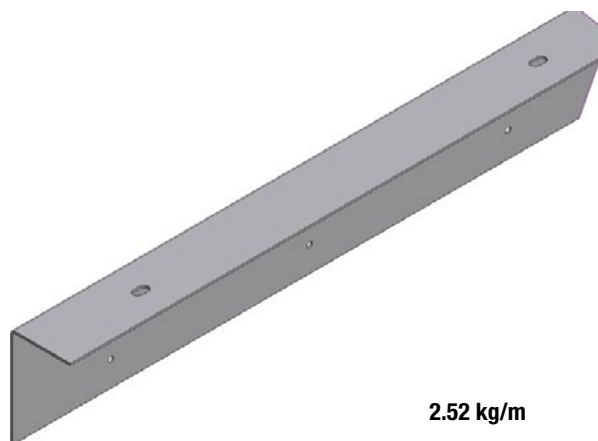
The angle profiles have holes in them at 200 mm centres and are suitable even when the curtain material is overlapped.

The attachment of the angle profiles to the building can be done using approved M8 concrete anchors or with screw fixings to steel girders.

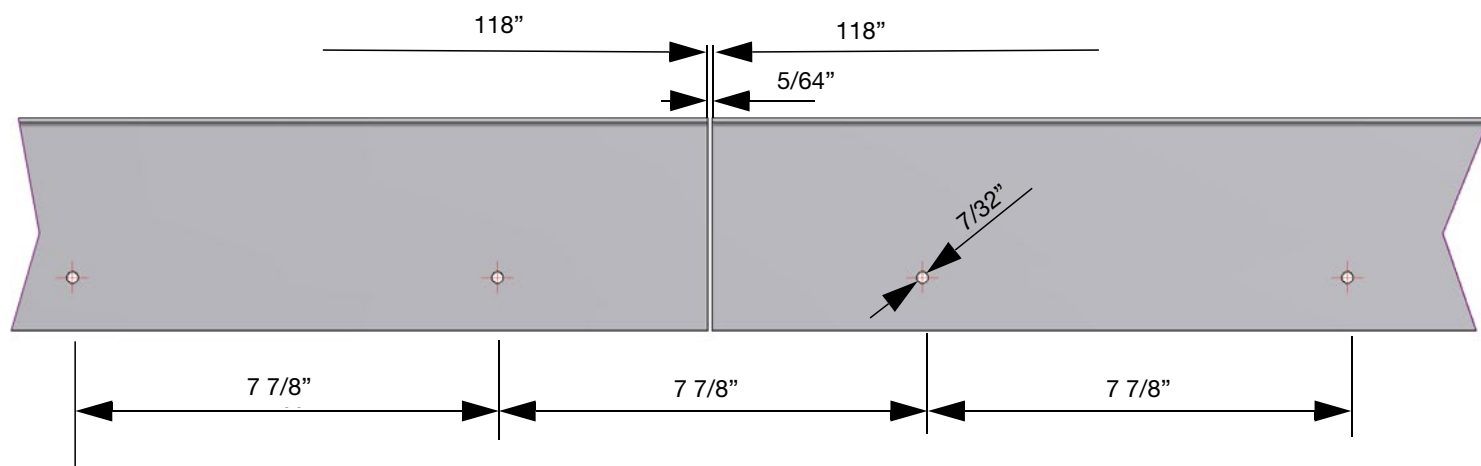
Material: 2.00 mm galvanized steel

Dimensions: 2-23/64" x 3 15/16" angled

Delivered length: 118-1/32"

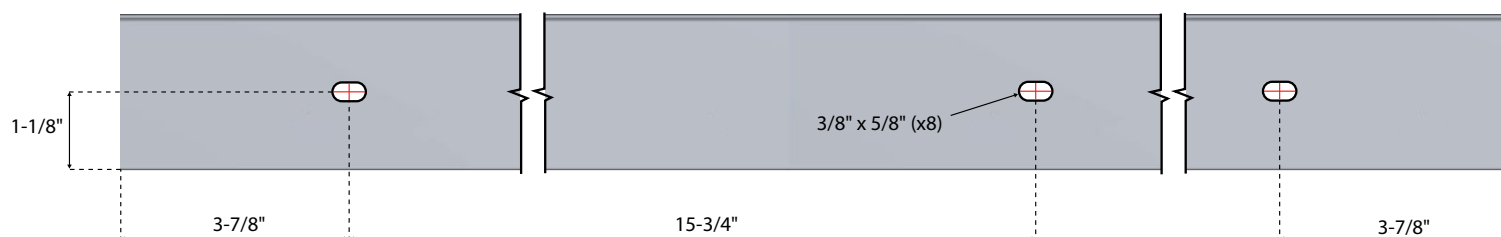
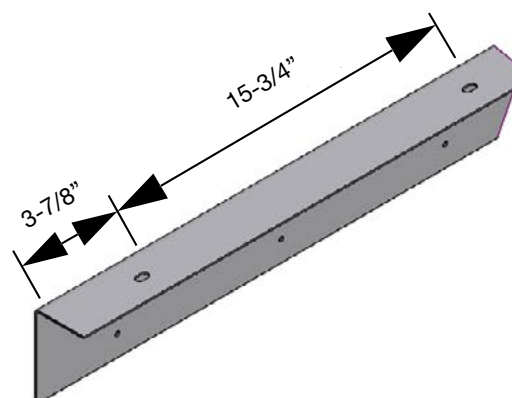


2.52 kg/m



PRE-DRILLED HOLES IN THE ANGLE PROFILE

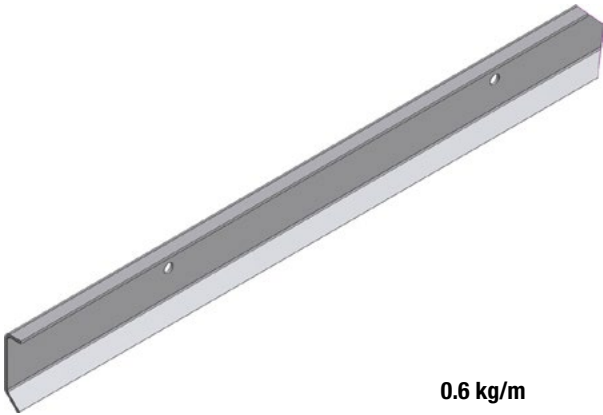
- There are 8 slotted holes ($3/8" \times 5/8"$) for the fixation to the building construction.
- The first one is $3-7/8"$ from the end of the profile, and then the grid is $15-3/4"$
- The last one is again $3-7/8"$ from the end of the profile.



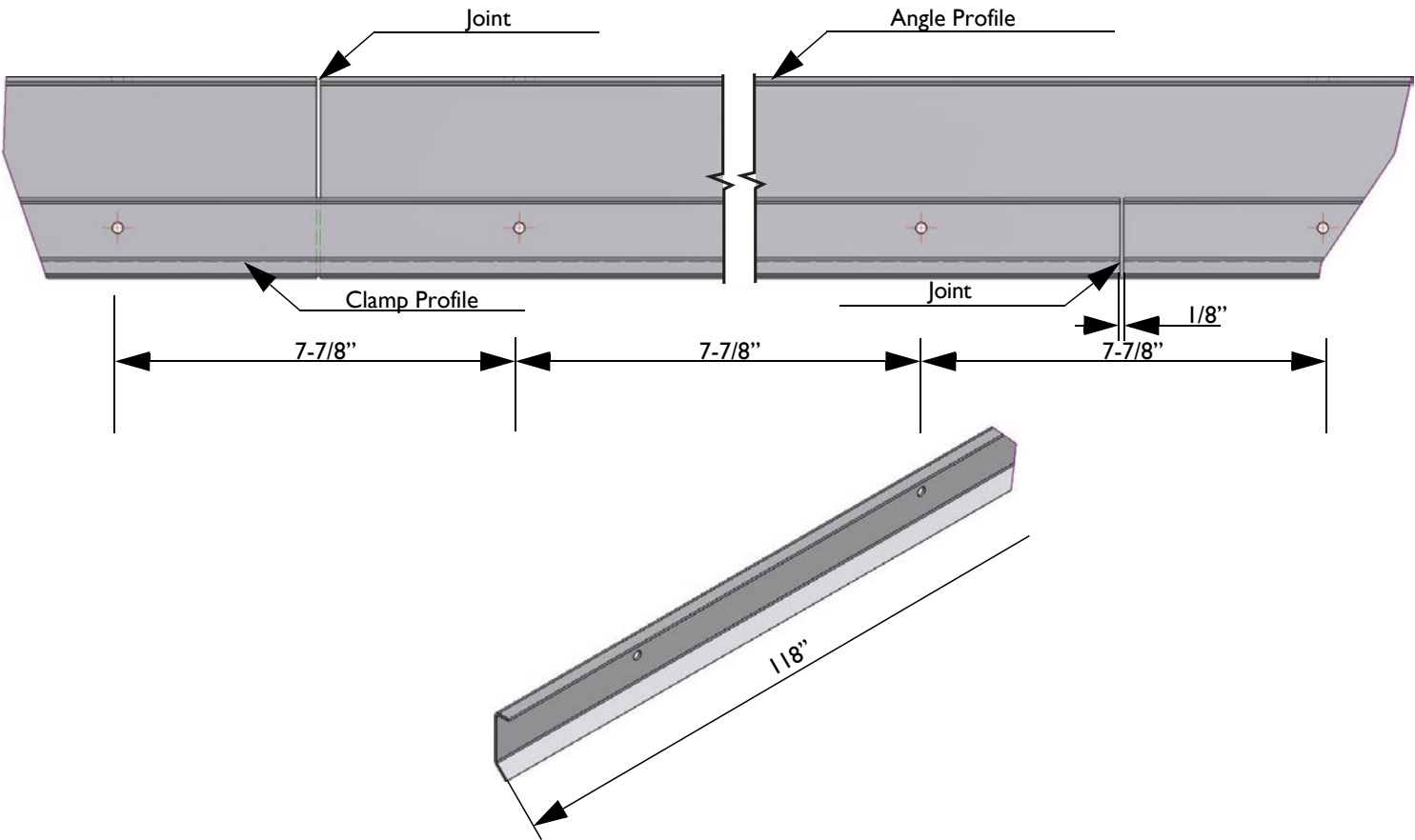
CLAMP PROFILE

The Smoke Curtain consists of a fabric material which is held within a series of angle profiles and thereby clamped.

Material: 1/16"galvanized steel
Dimensions: 25/64" x 1-3/16 x 25/64" angle
Delivered length: 118-1/32"



0.6 kg/m

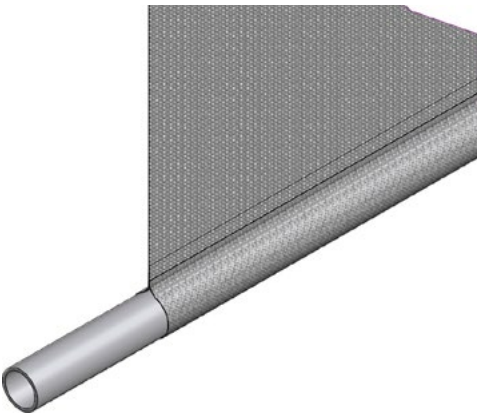
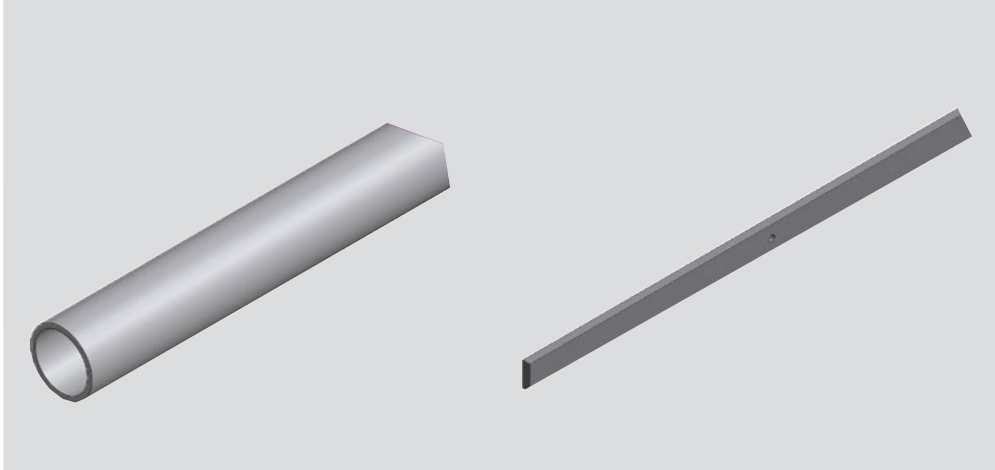


BOTTOM BAR

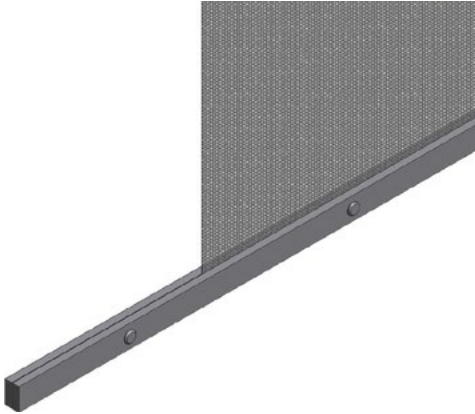
The bottom of the cloth is weighted, ensuring that the curtain remains taut, reducing the amount of deflection through air currents.

Material: Galvanized steel tube

TYPES OF BOTTOM BAR



R bottom bar (steel tube)



F bottom bar (flat steel bar)

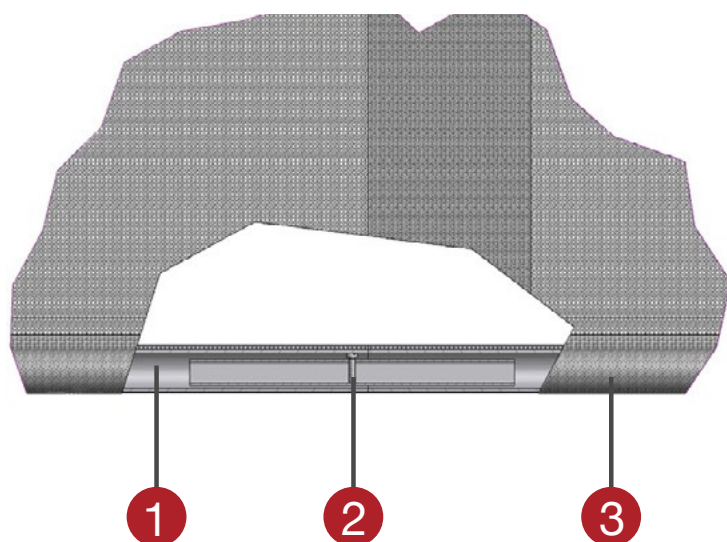
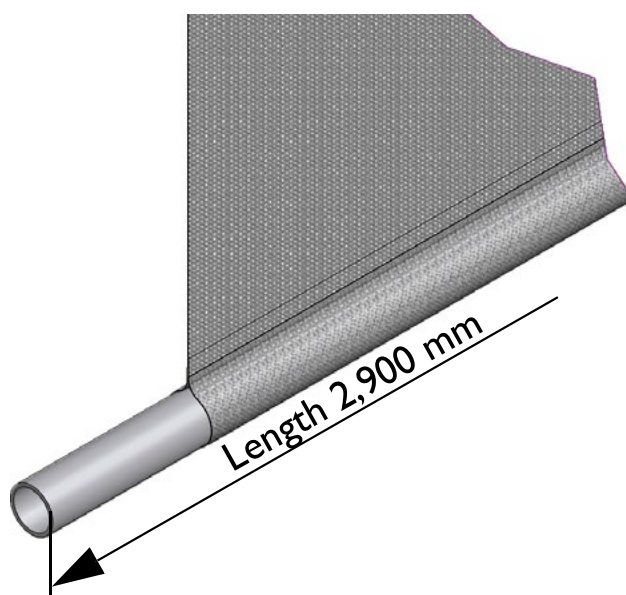
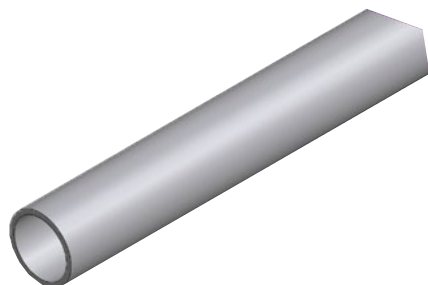
R BOTTOM BAR

Only for use up to D120 temperature class.
The bottom bars are stabilized where they meet with a coupling piece.

Material: Galvanized steel tube

Dimensions: 3/4" (Da = 26.9 mm)

Delivered length: 2900 mm

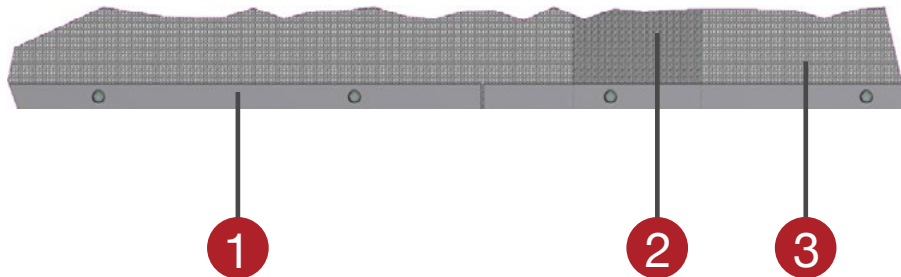
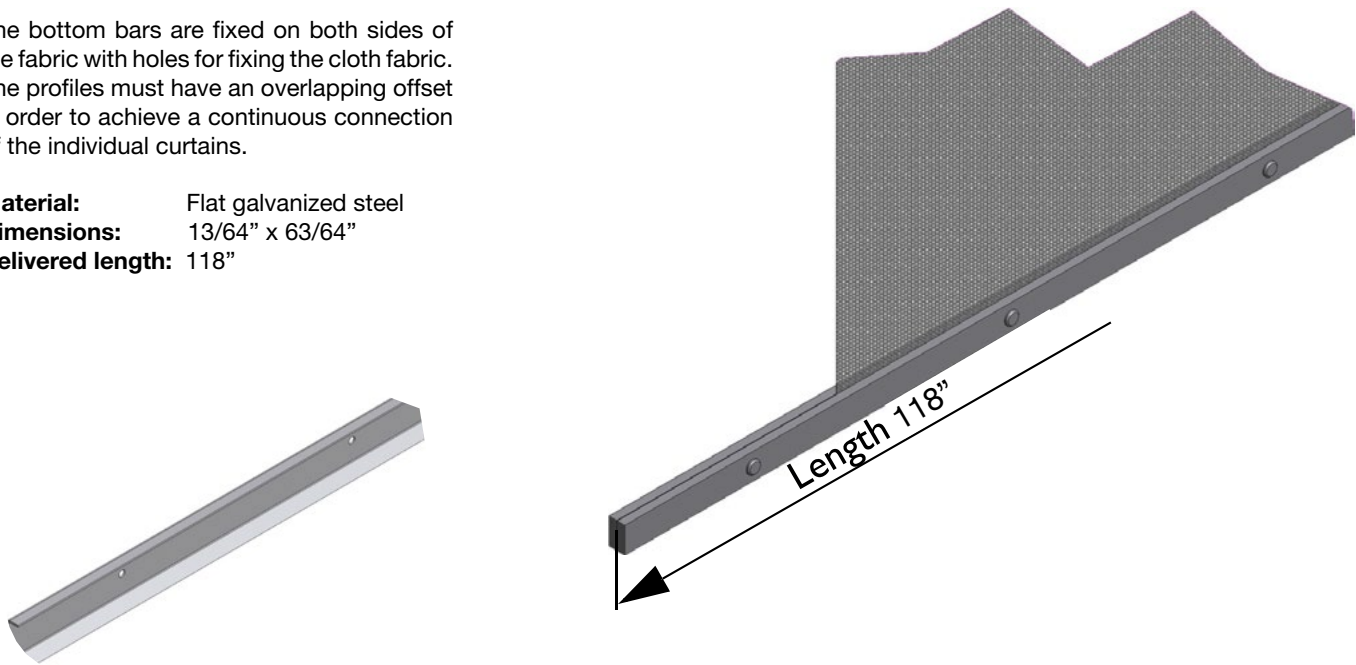


- 1 Bottom bar tube
- 2 Coupling piece
- 3 Cloth

F BOTTOM BAR

The bottom bars are fixed on both sides of the fabric with holes for fixing the cloth fabric. The profiles must have an overlapping offset in order to achieve a continuous connection of the individual curtains.

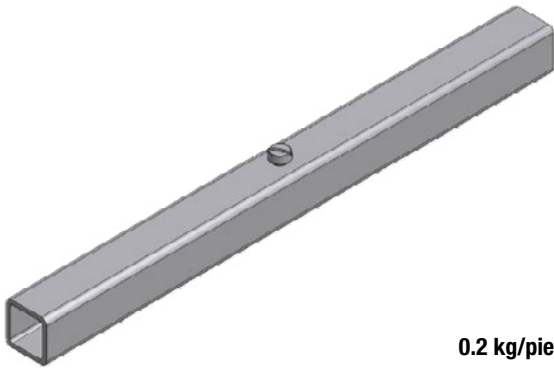
Material: Flat galvanized steel
Dimensions: 13/64" x 63/64"
Delivered length: 118"



- 1 Bottom bar (Riveted flat steel bar)
- 2 Overlap
- 3 Cloth

COUPLING PIECE

Material: Rectangular tube 1.5 mm
Dimensions: 5/8" x 5/8"
Delivered length: 7-7/8"



0.2 kg/piece

RIVETS

Material: Steel
Dimensions: 13/64" x 25/64"

RIVETS FLAT STEEL

Material: Steel
Dimensions: 3/16" x 5/8"



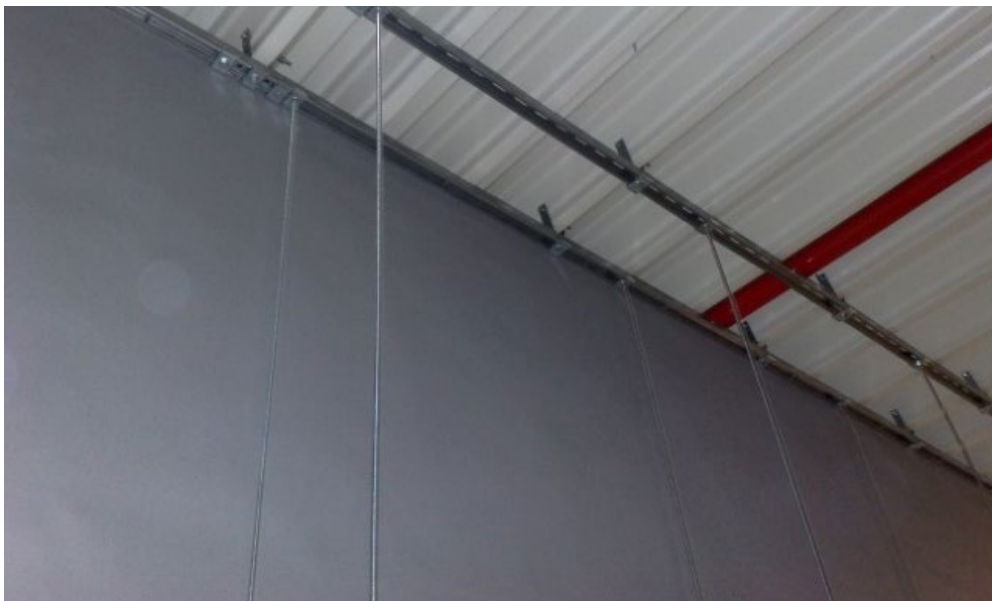
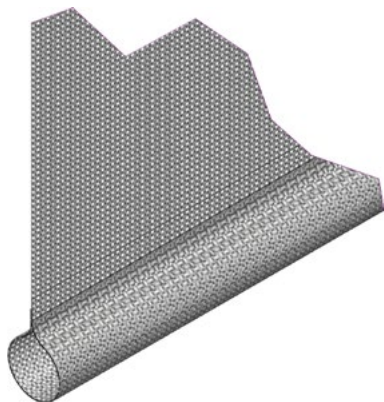
"DUO" TAPE

Dimensions: Width 63/64"
Delivered length: 63/64" on a roll



CLOTH MATERIALS

The curtain is made of a glass fabric with a polyurethane coating, with a silver grey color



TIME/TEMPERATURE CLASSIFICATION

D 120

The fabric consists of a glass filament fabric with a flame-retardant polyurethane coating. The embedded Al pigments ensure good heat reflection.

Color: silver grey

Class A2-s1,d0 in accordance with EN 13501-1.

DH 60

The fabric consists of a glass filament fabric with a flame-retardant polyurethane coating. The embedded Al pigments ensure good heat reflection.

Color: silver grey

Class A2-s1,d0 in accordance with EN 13501-1.

DH 120

The fabric consists of a glass filament fabric with stainless steel core and a flame-retardant polyurethane coating. The embedded Al pigments ensure good heat reflection.

Color: silver grey

Class A2-s1,d0 in accordance with EN 13501-1.

The curtain fabric has to meet functional requirements and so cannot be considered as decorative. If the fabric gets distorted or warped, or there are defects in the coating, these do not affect the fire protective properties.