# **Intumescent Air Transfer Grilles**

















### THERM-A-GRILLE

Up to 60 minutes fire resistance

#### INTRODUCTION

There is often a requirement for a ventilation aperture to be cut into a fire resisting compartment wall or door. This penetration breaches the integrity of the element so it is necessary to fit a suitable fire resistant ventilator unit.

Therm-A-Grille offers a specially designed solution to the problem by providing a light weight intumescent ventilator core with excellent airflow characteristics and rapid activation in the event of a fire.

#### **DESCRIPTION**

Therm-A-Grille consists of two sheets of steel mesh that have been coated with a graphite based intumescent material. The coating thickness has been optimized to ensure rapid activation whilst maintaining a high free area and good air flow rate.

The sheets are folded to form a box section which gives the assembly high strength and rigidity, provides a flange for fixing and also carries an intumescent edge seal. There is very little heat transfer between the two grille plates to ensure good insulation.

Therm-A-Grilles are 38mm thick for fitting to any 30 minute or 60 minute fire door.

#### **PERFORMANCE**

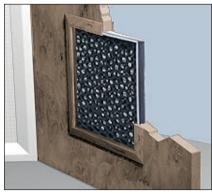
The fire performance of Therm-A-Grille has been proved in tests carried out to BS 476 Part 22 1987 where a grille measuring 570 x 570mm obtained an integrity and insulation rating of 66 minutes when mounted in a fire door panel. The free area of the grille is over 50% so the 600 x 600mm size vent has an effective ventilation aperture of 185,000mm2.

#### **AVAILABILITY**

Therm-A-Grille is available in stock sizes ranging from 100 x 100mm up to 600 x 600mm, in 50mm steps, in any combination of width and height. It can also be produced to special order in any intermediate size.

#### **INSTALLATION**

Therm-A-Grille is fitted as supplied into any vertical aperture and does not require any additional mastic sealant



Therm-A-Grille

to its perimeter. Fixing should be by 2" No. 8 steel screws at 150mm centres through the mesh forming the flange.

The grille should be fitted centrally within the thickness of the fire resisting element. For stud and plaster walls or any element where a void is present a steel sleeve should be provided to line the full depth of the aperture.

Facia or louvre plates may be fitted to the substrate surface.



## **AIR TRANSFER GRILLE (COVER PLATE)**

#### **FEATURES**

Door or wall mounted, Standard or Fireblock air transfer application. Quality 20swg mild steel construction, Wide 43mm flange border.

#### INTRODUCTION

Firewise presents a range of Mild Steel Louvered Grilles designed to satisfy all types of air transfer application in offices, shops, schools, hospitals and many other commercial projects. Manufactured using modern press machinery and production techniques the Grille is robustly fabricated from 20swg mild steel and comprises of

horizontal louvres set on an 8.5mm pitch with a 30° downward deflection using self tapping screws provided. Suitable for surface mounting in both door and wall applications, the steel construction ensures that the unit is satisfactory for both standard air transfer and fire rated applications where intumescent type fire dampers are utilised.

The wide flange border provides adequate clearance for fixing to the surrounding structure using self tapping screws provided. Slimline and unobtrusive the unit offers



a free area around 75% for economical selection and is readily available in a wide variety of normal sizes. Standard finish is a Stove Enamel Satin Silver or White.

#### ORDERING SPECIFICATION

Quantity, size (width x height mm), finish.