

Supalux

Non-Combustible Board

Splash Backs

**Non-Combustible Fire
Protection**
(to AS 1530.3-1984)

Description

Supalux is a calcium silicate board reinforced with selected fibres and fillers. It does not contain asbestos or any other inorganic fibre.

Supalux is off-white in colour and has a smooth sanded surface on one face with a lightly textured reverse face.

Supalux is a strong, lightweight non-combustible building board for use in many fire resisting and general purpose building applications. It is a high performance board which can provide up to 2 hour fire ratings to AS 1530 part 4 and up to 4 hours to BS 476.

Applications

Supalux is a non-combustible board designed for use in providing fire protection in gas installations requiring a non-combustible board. Approved for use in accordance with Australian Gas Codes (AS 5601 and AG 601)

- Splash backs behind gas commercial cooking appliances
- Heat insulation for the internal surfaces of gas heating elements

Other Applications

- Insulated or non-insulated fire rated ceilings up to 120 mins.
- Fire rated eaves linings
- Partitions (non-load bearing), up to 120 mins with timber studs and up to 240 mins with steel studs.

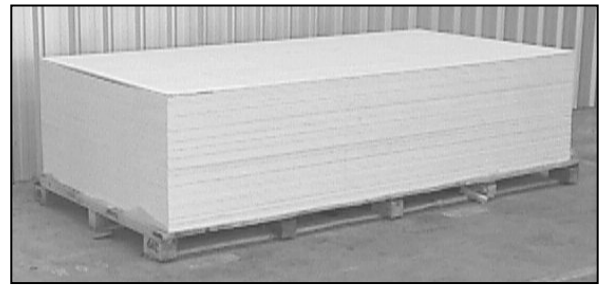
Advantages

- Easily cut and shaped with timber tools
- Non-combustible
- May be finished or decorated in normal building methods
- Moisture and chemically resistant
- Withstands continuous temperatures up to 250°C.

Performance Specifications

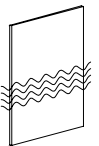
Fire Testing

Fire tests have been conducted to AS1530.3, BS 476 and other international standards. Numerous approvals are available for ceilings, partitions and non-combustible applications. Please speak to Trafalgar's technical department for test data for your particular application.



Effect of Moisture

Will absorb water causing some loss of strength which is fully recovered on drying. Moisture will not cause leaching or efflorescence and has no permanent effect on the board.

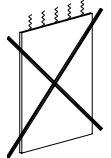


Thermal

Provides a degree of thermal insulation ($k = 0.17W/mK$) and is an ideal support for insulation materials.

Smoke Generation

As the boards contain only a small quantity of organic material and do not rely on resins or fire retardants to achieve performance, emission of smoke and toxic gasses in fire is minimal. When tested to AS 1530.3, Supalux achieves a smoke developed rating of zero.

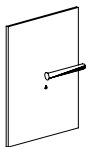


Biological

Resistant to attack by insects or vermin and will not nourish mould growth but should be sealed when used in areas where boards are liable to absorb matter that will support mould.

Chemical

Resistant to brine and chlorine, low concentrations of most acids, alkalis, bleaching agents and solvents but boards should be protected where high chemical concentrations are likely to occur. pH value 7 - 9.



Compatibility

Compatible with all common building materials; non-caustic and will not promote corrosion; will not affect bituminous compounds; should be protected when in contact with anodised aluminium.

Nominal Sizes and Weights		
Thicknesses	6, 9 and 12mm	
Width	1200 mm	
Length	2400 mm	
Weights	6mm	5.8 kg/m ²
	9mm	8.7 kg/m ²
	12mm	11.7 kg/m ²

Site Work

Working

General

Use normal woodworking tools

Cutting

Use a fine-toothed panel saw. For shaped cuts use a pad saw, keyhole saw or coping saw. Work with fair face upwards and support the board as cutting progresses. Quick and easy rough cuts can be made by scoring boards with a knife and snapping over a straight edge. For power sawing use a tungsten carbide or diamond tipped blade.

Drilling

Use normal low or high speed drills. Place scrap board under the drilling location to ensure a clean hole.

Sanding

Sand with conventional papers. Garnet paper is best for fine sanding.

Health and Safety

Supalux is formulated without asbestos or any other inorganic fibre, and no special precautions are necessary in handling or working. When using power saws in a confined space, dust extraction equipment is recommended to control dust levels.

Boards will support their own weight, but are not load bearing. Horizontal boards must not be walked on as they are not designed to take additional weight between supports; if there is a risk of this occurring, warning notices should be displayed.

Refer to Material Safety Data Sheet for further information.

Warranty

Limited Warranty:

Purchase and use of this product is subject to Trafalgar's standard terms and conditions of sale. In the event of a product defect, Trafalgar's sole liability is, at our option, to replace product or return its purchase price.

All other warranties whether express or implied, including without limitations, any warranty of merchantability or fitness of purpose are expressly disclaimed unless prohibited by law or given in writing by Trafalgar Building Products for a specific project.

Disclaimer:

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Splash Backs

Fire Protection of Commercial Catering Equipment

Introduction

In the past, many fires have been caused by the close proximity of combustible materials to gas and electrical appliances that operated at high temperatures.

Often combustible materials such as plasterboard and timber are located directly behind commercial catering equipment. Over time, the heat generated by the appliance passes through the tiles or stainless steel that was used as the non-combustible surface in kitchens and causes combustion of materials within the walls.

Gas standards such as AG 601 and AS5601, providing specifications for non-combustible insulating materials that may be used to provide fire protection to combustible surfaces. Such materials must be acceptable for use in this application - Supalux is such a material.

Installation

Stud supports must be installed at maximum 400mm centres. Fix Supalux either directly to studs or through plasterboard with back (textured) face outwards. Screws should be countersunk and fixed at 200mm centres.

Tiling

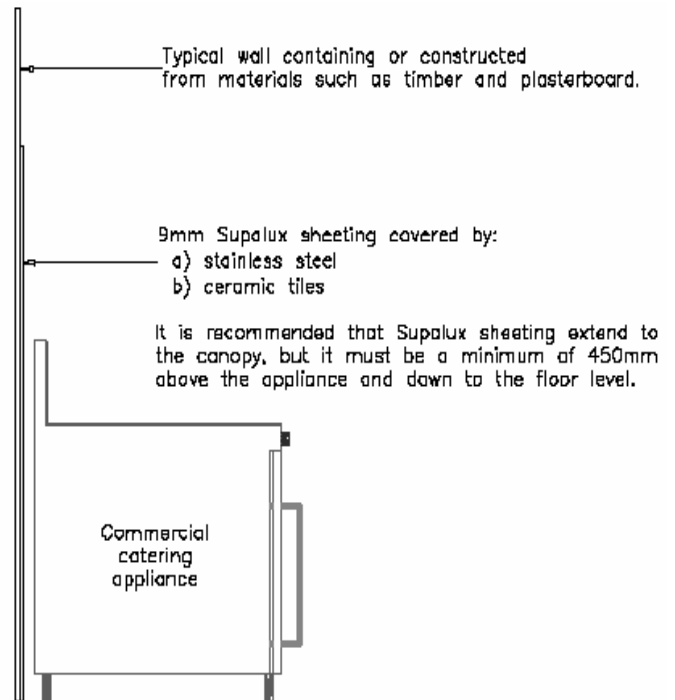
Before fixing of board, seal Supalux on both sides with PVA glue or watered down tile adhesive. Fix tiles to face of Supalux using standard methods with tile adhesive

Sheeting with Stainless Steel

Stainless steel should be fixed to studs through the Supalux sheeting. Gluing stainless to Supalux is not recommended because differences in thermal movement may cause cracking of Supalux.

Clearances

Supalux is to be fitted to provide protection from floor level and it is recommended that Supalux extend to canopy for most applications, however AS5601 specifies a minimum of 450mm above commercial catering appliances.



With some catering equipment, an air gap must be maintained at the rear of an appliance for cooling purposes. Relevant details given in the manufacturers installation instructions regarding such air gaps must be observed.

In some cases, it may be necessary to fit a spacer between the appliance and the wall to ensure that the air gap is maintained at all times. Never remove a spacer fitted by the appliance manufacturer.

Testing and Specification

Testing

Supalux has been fire tested to AS 1530.3 and meets the requirements of AS 5601 and AG 601 as a suitable board for protection of combustible materials.

Specification

“Combustible surfaces behind commercial catering appliances to be protected in accordance with AS 5601 and AG601 using a Splash Back of 9mm thick Supalux provided by Trafalgar Building Products. Supalux is to be finished with a protective coating of (tiles or stainless steel) to manufacturers printed specifications.”

Supalux Product Properties

Product Property	Value						
Length and breadth tolerance (mm)	-3 to -1						
Thickness tolerance (mm)	-0.7 to 0						
Nominal Dry Density (kg/m ³)	875						
Alkalinity / pH value	7 - 9						
Moisture content (%) - Conditioned	3 - 6						
Moisture movement (%) - Conditioned to Saturated	0.05						
Water Absorption (%)	68						
Thermal conductivity (W/mK)	0.17						
Thermal movement (x 10 ⁻⁶ / °C) up to 100°C	9						
Flexural modulus (N/mm ²) - Average of 2 directions	3300						
Bonding Strength (N/mm ²) - Average of 2 directions	8.5						
Tensile strength (N/mm ²) - Average of 2 directions	3.5						
Compressive strength (N/mm ²)	6						
Compressive strength (N/mm ²) at 5% compression	8						
Weights (kg/m ²)	<table border="0"> <tr> <td>6mm</td> <td>5.8</td> </tr> <tr> <td>9mm</td> <td>8.7</td> </tr> <tr> <td>12mm</td> <td>11.7</td> </tr> </table>	6mm	5.8	9mm	8.7	12mm	11.7
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