

# SUPALUX

## Non-Combustible Board

### Description

Supalux is a calcium silicate board that does not contain asbestos or any other inorganic fibre. 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.

### Performance Specifications

#### Fire Testing

Fire tests have been conducted to AS1530.3, BS 476 and other international standards.

#### Effect of Moisture

Will absorb water causing some loss of strength which is fully recovered on drying.

#### 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 gases 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.

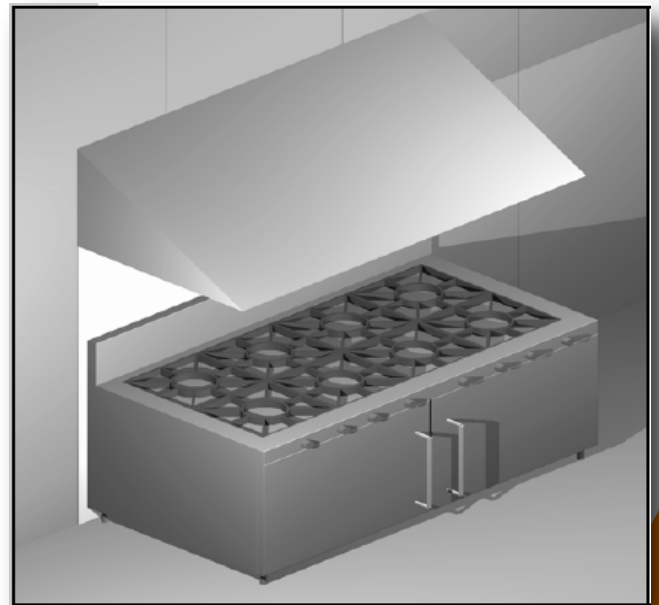
#### Compatibility

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.

### Applications

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



THERMAL ELECTRIC ELEMENTS  
AUSTRALIA

HEATING SOLUTION PROFESSIONALS

Free Phone 1800 025 287 Free Fax 1800 631 235

[www.thermalelectric.com.au](http://www.thermalelectric.com.au)

ABN 59 001 255 492  
© Thermal Electric Elements 2009

# SUPALUX

## Non-Combustible Board

### Site Work

#### 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.

### Installation of Splash Backs

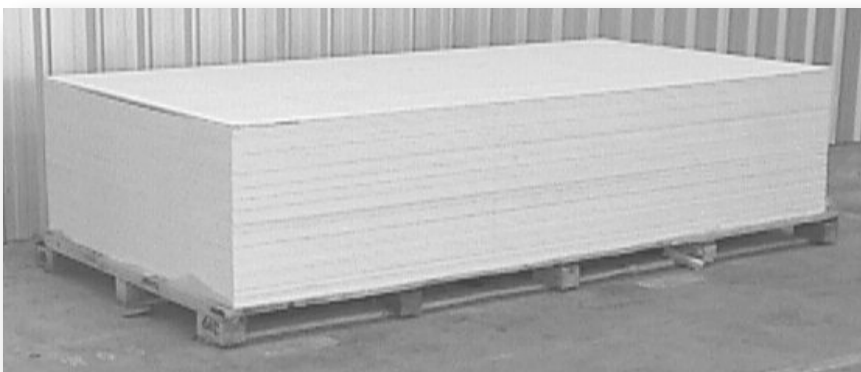
Stud supports must be installed at maximum 400mm centres. Fix Supalux either directly to studs or through plasterboard with back (textured) face outwards. Screws should be countersunk and fixed at 200mm centres.

#### 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

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.

#### Product Properties

Length and breadth tolerance (mm) -	-3 to -1
Thickness tolerance (mm) -	-0.7 to 0
Nominal Dry Density (kg/m <sup>3</sup> )	875
Alkalinity/pH value	7 to 9
Moisture content (%) - conditioned	3 to 6
Moisture movement (%) - conditioned to saturated	0.05
Water absorption (%)	68
Thermal conductivity (W/mK)	0.17



Free Phone 1800 025 287 Free Fax 1800 631 235

[www.thermalelectric.com.au](http://www.thermalelectric.com.au)

ABN 59 001 255 492  
© Thermal Electric Elements 2009