

## S420 Thermal

### Description:

S420 Thermal is a water based acrylic membrane with significant heat insulating capability. The membrane is designed to minimize heat entering buildings through roofs and as a key for the S400 Silicone membrane. (see the S400 data sheet) S420 Thermal forms, one component of the AMI silicone roofing system.

The product is non- hazardous.

S420 Thermal was designed to be used in conjunction with the S400 Silicone membrane in a single tie coat. It can be used as a thermal block membrane in its own right (in two coats) at a dry coat thickness of 1 – 1.2mm.

### Features:

Combination of waterproofing membrane, heat blocking barrier and a key for the S400 Silicone membrane.

### Recommended Use:

S420 is designed to be used in conjunction with the S400 Silicone waterproofing membrane and as a stand-alone roof membrane with significant heat blocking capability.

### Heat Blocking Characteristics:

500-micron brush applied film of each coating was applied to galvanised steel plates. The plates were heated on a hot plate to 130°C. The recorded topside of the steel plates is as follows:

Time(min)	Bare Plate Temperature	A	B	C
150	127-132	121	110	104

- a. Typical acrylic coating.
- b. Commercially available insulating roof coating.
- c. S420 Thermal.

A S420 Thermal coating of approximately 600 microns when applied to an enclosed structure, is more effective than an internally insulated 75mm batts which have an R factor of 2.5. The S420 temperature range was 0.9 – 2.3°C lower than the batt insulated structure.

Heavier applications of S420 would improve the above results however, AMI manufactures Heat Block specifically roof insulation applications. S420 is designed to be used in conjunction with AMI's long term roof warranty systems.

## **Application:**

S420 Thermal is a low viscosity membrane which is trowel applied onto substrates and back rolled to an even finish. The product can not be sprayed.

The product can be applied on its own or over Ultra Flex reinforced waterbased polyurethane membrane within the application window for Ultra Flex. The product is applied at the rate of 1 litre per 2sm to provide a 200 – 300-micron dry coat finish.

If used as a single membrane system, Hydrostatic epoxy must be used as the primer.

## **Coverage:**

Applied in one coat via trowel and back rolling, 2sm per litre of product.

## **Drying Time:**

Average drying time at 25 degrees C, is between 1 to 2 hours (re-coat), depending on the combination of ambient temperature and wind velocity.

Allow one day before overcoating with the S400 Silicone membrane.

**Wash up:** Water.

## **Size & Colour:**

Available in 15 litre pails in light grey only.

## **AMI Extended Warranty Roof System:**

20 and 25-year warranty is available on several roofing systems manufactured by AMI.

### **System 1: 20-year warranty.**

2 coats of Hydrostatic Water based epoxy as the priming system.

1 coat of Ultra Flex RX3 RX3 (reinforced) waterbased polyurethane membrane.

1 coat of S420 Thermal block membrane.

One coat of S400 Silicone membrane

### **System 2: 25-year warranty.**

As above but with two coats of S400 Silicone membrane.

## **Storage:**

Store in a cool area, out of direct sun light. Unopened containers have a shelf life of 18 months.