



INSULATED CONCRETE CURING BLANKETS



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WHY YOU NEED INSULATED CONCRETE CURING BLANKETS

SHORTEN CONCRETE CURING TIME

The curing of concrete is a chemical process and as in many chemical reactions the rate is temperature dependent. The lower the temperature, the slower is the process of setting of concrete. Even relatively mild cold weather can slow concrete curing. At 23°C you might be able to safely strip the formwork from concrete job in 4 days. But when temperature reduces down to 10°C, the same concrete job may take 8 days to reach a strength level that allows you to strip the formwork. The curing time would be much longer for temperatures below 10°C.

PREVENT FREEZING OF GROUNDS AND FORMWORK

Concrete suppliers recommend that concrete should not be poured on frozen ground, or on to reinforcing steel or formwork which has a temperature near freezing point. You can use our insulated thermal blanket to keep these areas covered in preparation of pouring concrete to help avoid frozen grounds or near freezing point structures. If formwork areas are covered overnight, frosts will not delay pouring of the concrete in the following morning.

PREVENT FREEZING OF YOUR CONCRETE JOB

At temperatures around 0°C the curing of freshly poured concrete is very slow and there is the added danger of freezing the water in the concrete. If some of the water in the concrete freezes, the curing process might virtually stop. These interruptions to the hydration process could increase the porosity of the concrete and reduce the compression strength and stability of the concrete. In some cases, only the water near surface of the concrete freezes if ambient temperature drops below 0°C. But the temperature in the core of the concrete stays above freezing point due to heat generated in the hydration process. This difference causes high pressures in the concrete, which is no longer plastic and will result in scaling or spalling. This effect will be severe if concrete suffers several freezing and thawing cycles due to the fluctuation in ambient temperatures. Insulated concrete curing blankets are ideal to prevent freezing of your freshly poured concrete.

SMOOTHEN UNDESIRABLE TEMPERATURE FLUCTUATIONS

Rapid temperature changes in the freshly poured concrete can result in shrinkage, cracking, reduce in strength and durability. Some cases, extreme fluctuations in ambient temperatures during curing can negatively affect the properties of the concrete. Insulated concrete blankets can help in smoothening these undesirable temperature fluctuations.



FLEXIMAKE INSULATED CONCRETE CURING BLANKETS



APPLICATIONS

- ✓ Slabs
- ✓ Floors
- ✓ Foundations for machines
- ✓ Foundations of wind turbines
- ✓ Concrete structures of roads
- ✓ Concrete structures of tunnels
- ✓ Concrete structures of bridges
- ✓ Precast concrete structures
- ✓ Prestressed concrete structures
- ✓ Concrete structures of buildings
- ✓ Concrete Pavings
- ✓ Concrete Walls
- ✓ Concrete Chimneys
- ✓ Concrete Trenches
- ✓ Concrete Footings

Fleximake insulated blankets are type tested at NATA accredited Australian testing laboratory

KEY BENEFITS OF FLEXIMAKE CONCRETE CURING BLANKETS

- ✓ Heavy duty coated woven 260gsm, 16 × 16 weave/square-inch polyethylene (PE) skins
- ✓ High performance innovative closed cell insulation core
- ✓ Hemmed edges
- ✓ Welded Joints for moisture proofing and hold to the hydration (no stitched joints)
- ✓ Heavy duty eyelets along all edges with 1m - 1.5m spacing
- ✓ Ultra violet (UV) treated skin material for longevity
- ✓ Economical and cost effective
- ✓ High quality, high strength, lightweight and long lasting
- ✓ Hydrophobic (i.e. does not become soaked in water)
- ✓ Simple to handle, simple to apply, stays flat on concrete surface and easy to roll for storage
- ✓ Suitable for wide temperature range (does not get brittle at low temperatures)



STANDARD INSULATED CONCRETE CURING BLANKET RANGE

Fleximake manufactures a variety of standard sizes of rectangular insulated concrete curing blankets, thickness from 4mm up to 12mm and widths of 1.5m, 3.0m and 4.5m. There is no limit to the length. Please let us know the length you require. Standard insulated concrete blankets comes with hemmed, welded edges and heavy duty eyelets placed along all edges at 1m to 1.5m spacing. Details of our standard range are listed in the table below.



Type No.	Thickness (mm)	Width (m)	Thermal Resistance (Approx.)		
			R-Value (SI units) (Km ² /W)	R-Value (Imperial Units) (°F-ft ² -h/BTU)	R per Inch (Imperial Units) (°F-ft ² -h/BTU/in)
FMCB0415	4mm	1.5m	R0.11	R0.62	3.0
FMCB0430	4mm	3.0m	R0.11	R0.62	3.0
FMCB0445	4mm	4.5m	R0.11	R0.62	3.0
FMCB0615	6mm	1.5m	R0.16	R0.91	3.0
FMCB0630	6mm	3.0m	R0.16	R0.91	3.0
FMCB0645	6mm	4.5m	R0.16	R0.91	3.0
FMCB0815	8mm	1.5m	R0.21	R1.19	3.0
FMCB0830	8mm	3.0m	R0.21	R1.19	3.0
FMCB0845	8mm	4.5m	R0.21	R1.19	3.0
FMCB1215	12mm	1.5m	R0.32	R1.82	3.0
FMCB1230	12mm	3.0m	R0.32	R1.82	3.0
FMCB1245	12mm	4.5m	R0.32	R1.82	3.0



CUSTOM MADE INSULATED CONCRETE BLANKETS

As an Australian based manufacturer, we are also able to produce custom concrete curing blanket sizes for any project you might have in mind, no matter how large or small, or any shape. Some examples are:

- ✓ Thermal blankets to wrap around concrete columns
- ✓ Thermal blankets for foundation for wind turbines
- ✓ Thermal blankets to drape over concrete walls



For custom blankets, all you have to do is contact our knowledgeable sales staff with your concrete curing blanket specifications, for example:

- ✓ Approximate dimensions and sketch of the shape or drawing of the concrete structure
- ✓ Details of required securing method, example: eyelets, D-rings, strapping etc.
- ✓ Required thickness or R-value (if available)

Fleximake can also print your logo on insulated concrete blankets. All you need to do is send us your company logo and we will take care of the rest!



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