

# **AIRCRETE SEVEN BLOCKS**



Mannok Aircrete Seven block combines a very high strength to weight ration with an excellent thermal performance making them ideally suited to multi-storey domestic and commercial buildings.

## **PERFORMANCE & PROPERTIES**

**GROSS DRY DENSITY (KG/M³)** 760

MEAN COMPRESSIVE STRENGTH (N/mm²) 7.5

THERMAL CONDUCTIVITY (W/mK) 0.19

**DIMENSIONAL TOLERANCE IN GPLM D1** 

DIMENSIONAL STABILITY/MOISTURE MOVEMENT (mm/m) < 0.4

#### **FIRE RESISTANCE**

Mannok thermal blocks provide excellent fire protection in both load bearing and non load bearing applications. They are classed as non combustible and have a Class 0 resistance to surface spread of flame and category A1 in accordance with BS EN 13501-1.

## PREMIUM GRADE BAGGED CEMENT

## CEM II/A-L 42,5N



High Strength

#### **IDEAL FOR**



Mortar



Screed



Plaster



Concrete

#### **AVAILABLE IN:**

#### **PAPER**

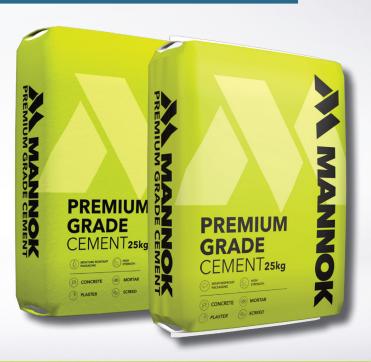
#### **PLASTIC**



Moisture Resistant Packaging



Weatherproof Packaging



The strongest in our bagged cement range, our Premium Grade Cement boasts 42,5N strength for exceptional performance.

For jobs which require higher strength cement, such as screeds, concrete, plastering and mortar, this Premium Grade product is ideal. Floor screeders in particular will be impressed by the smooth, uniform finish and drying performance of this high-performance bagged cement.

With a choice of paper or weatherproof plastic bags, you can have added reassurance that your Premium Grade Cement is protected, whatever the weather.

#### **PERFORMANCE & PROPERTIES**

- > CEM II/A-L 42,5N
- > High Strength
- > Quick Drying
- > Uniform finish

#### **AVAILABLE IN**

- > 25kg Paper or Plastic Bags
- > 60 Bag / 1.5 Tonne Pallets
- > 80 Bag / 2 Tonne Pallets

## **EPS 70**



## **PERFORMANCE & PROPERTIES**

**LENGTH (MM)** 1200, 1800, 2400

WIDTH (MM) 600, 1200

**THICKNESS\* (MM)** 25 - 100

**COMPRESSIVE STRENGTH @10% (KPA) 70** 

**BENDING STRENGTH (KPA) 115** 

**DIMENSIONAL STABILITY DS (N) 5** 

THERMAL CONDUCTIVITY (W/MK) 0.038

WATER VAPOUR DIFFUSION FACTOR, Q 20-40

WATER VAPOUR PERMEABILITY, (MG/PANM) 0.018 - 0.36

TOTAL IMMERSION WL (T) 05 (Less than 5%)

PARTIAL IMMERSION (Less than 1%)

**EDGE DETAIL\*\*** Square

APPROX. DENSITY (KG/M3) 15

FIRE CLASSIFICATION E/F

- Mannok EPS insulation boards manufactured under an EN ISO 9001 Quality Management system
- Mannok EPS insulation boards are certified by both the Irish Agrement Board(IAB) and the British Board of Agrement (BBA) for use in underfloor heating systems
- Mannok EPS insulation boards contains a flame-retardant additive (FRA) which makes it difficult to ignite
- > For ease of installation, Mannok EPS boards can be cut to bespoke shapes and sizes
- > When correctly installed, Mannok EPS insulation boards have a service life comparable to that of the building

<sup>\*</sup> other thicknesses available on request

<sup>\*\*</sup> tongue and groove edge available on some boards

## **EPS PEARL 70**



## **PERFORMANCE & PROPERTIES**

**LENGTH (MM)** 1200, 1800, 2400

WIDTH (MM) 600, 1200

**THICKNESS\* (MM)** 25 - 100

**COMPRESSIVE STRENGTH @10% (KPA) 70** 

**BENDING STRENGTH (KPA) 115** 

**DIMENSIONAL STABILITY DS (N) 5** 

THERMAL CONDUCTIVITY (W/MK) 0.031

WATER VAPOUR DIFFUSION FACTOR, Q 20-40

WATER VAPOUR PERMEABILITY, (MG/PANM) 0.019 - 0.06

TOTAL IMMERSION WL (T) 05 (Less than 5%)

PARTIAL IMMERSION (Less than 1%)

**EDGE DETAIL\*\*** Square

APPROX. DENSITY (KG/M3) 15

FIRE CLASSIFICATION E

- Mannok EPS insulation boards manufactured under an EN ISO 9001 Quality Management system
- Mannok EPS insulation boards are certified by both the Irish Agrement Board(IAB) and the British Board of Agrement (BBA) for use in underfloor heating systems
- Mannok EPS insulation boards contains a flame-retardant additive (FRA) which makes it difficult to ignite
- > For ease of installation, Mannok EPS boards can be cut to bespoke shapes and sizes
- When correctly installed, Mannok EPS insulation boards have a service life comparable to that of the building

<sup>\*</sup> Other thicknesses available on request

<sup>\*\*</sup> Tongue and groove edge available on some boards

## **MANNOK THERM FLOOR / MF**



Mannok Therm Floor / MF insulation is a high performance, fibre free board, with a rigid thermoset insulation core and faced on both sides with a low emissivity composite foil facing.

The high compressive strength of Mannok Therm Floor / MF enables it to withstand the dead and imposed loads transmitted through the floor.

Mannok Therm Floor / MF is suitable for new build and refurbishments projects in both domestic and commercial build. With specific properties that optimise the performance of underfloor heating.

For suspended timber floors in particular, Mannok Therm Floor / MF reduces heat loss by an air infiltration method, making it the ideal solution for upgrading the thermal performance of existing floors.

## **PERFORMANCE & PROPERTIES**

**BOARD SIZE (mm)** 1200 x 2400

**THICKNESS (mm) 20 - 200** 

THERMAL CONDUCTIVITY (λ) 0.022w/mk

**FACERS** Low emissivity foil facers

**CORE WATER VAPOUR RESISTIVITY** ≈ 300MNs/gm

**COMPRESSIVE STRENGTH** > 150kPa

- Low thermal conductivity, minimising the thickness required to achieve the design U-value.
- Certified under BBA certificate number 07/4444 and IAB certificate number 05/0223
- > Available as a BIM object
- Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)
- Achieves an A+ rating when compared to the BRE Green Guide.

## **MANNOK THERM WALL / MW**



Mannok Therm Wall / MW PIR insulation is a high performance, fibre free board, with a rigid thermoset insulation core and faced on both sides with a low emissivity composite foil facing.

The low emissivity foil facings increase the thermal resistance an unventilated cavity adjacent to the insulation, reducing the overall U-value of the wall.

The good dimensional tolerances of the Mannok Therm Wall / MW PIR insulation board enable it to be tightly butted to form a continuous layer of insulation. Joints can then be easily taped with an aluminium foil tape to provide an effective vapour control layer.

#### PERFORMANCE & PROPERTIES

**BOARD SIZE (mm)** 1200 x 2400

**THICKNESS (mm) 20 - 200** 

THERMAL CONDUCTIVITY (λ) 0.022w/mk

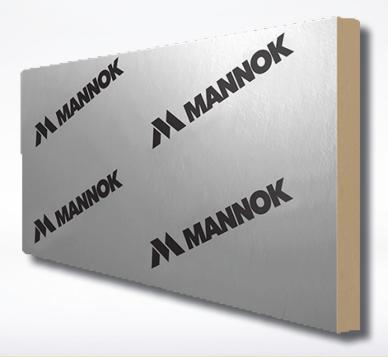
**FACERS** Low emissivity foil facers

**CORE WATER VAPOUR RESISTIVITY** ≈ 300MNs/gm

**COMPRESSIVE STRENGTH** > 150kPa

- Certified under BBA certificate number 07/4444
- Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)
- > Achieves an A+ rating when compared to the BRE Green Guide

## **MANNOK THERM CAVITY / MC**



Mannok Therm Cavity / MC PIR insulation is a high performance, fibre free board, with a rigid thermoset insulation core and faced on both sides with a low emissivity composite foil facing, for use in partial fill cavity wall applications.

The low emissivity foil facings increases the thermal resistance of the residual cavity and reducing the overall U-value of the wall.

The good dimensional tolerances of the Mannok Therm Cavity / MC PIR insulation board enabling it to be tightly butted to form a continuous layer of insulation.

Available with profiled T & G edges aiding installation and ensuring continuity of insulation across the joint.

#### **PERFORMANCE & PROPERTIES**

**BOARD SIZE (mm)** 450 x 1200

**THICKNESS (mm)** 25 - 110

**EDGE** Butt, tongue and groove

THERMAL CONDUCTIVITY (λ) 0.022w/mk

FACERS Low emissivity foil facers

**CORE WATER VAPOUR RESISTIVITY** ≈ 300MNs/gm

**COMPRESSIVE STRENGTH** > 150kPa

- Therm Cavity Wall board sizes are coordinated with standard wall tie spacings
- > Tongue and groove edging for continuity of insulation across joints
- Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)
- > Achieves an A+ rating when compared to the BRE Green Guide

## **MANNOK ISOSHIELD**



Introducing IsoShield - superior full fill cavity wall insulation that combines ease of construction with all the benefits of full fill PIR.

## **PERFORMANCE & PROPERTIES**

**BOARD SIZE (mm)** 1200 x 450

THICKNESS (mm) 72, 97, 122, 147

THERMAL CONDUCTIVITY (λ) 0.022w/mk

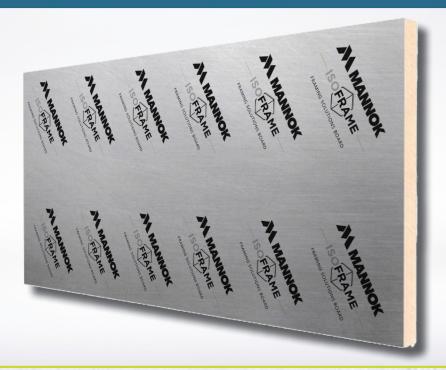
**FACERS** Premium Stucco, Embossed Foil Facings

**CORE WATER VAPOUR RESISTIVITY** ≈ 150MNs/gm

**COMPRESSIVE STRENGTH** > 150kPa

- > BBA Certified
- Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)
- > Achieves an A+ rating when compared to the BRE Green Guide.

## **MANNOK ISOFRAME**



Foil faced rigid Polyisocyanurate (PIR) insulation, for external cavity walls of conventional timber and steel framed dwellings with a masonry outer leaf. Height restrictions apply in some cases. Mannok IsoFrame may be installed between structural studs. Also, used with insulated dry lining systems and as insulated sheathing or used as part of a system incorporating any combination of these options.

Mannok IsoFrame has been tested to BS EN 1365-1:2012 and BS 476-21:1987 for use with structural steel/timber studs, where a fire resistance of 30 minutes is required. In steel stud construction it has 60 minutes fire resistance.

## **PERFORMANCE & PROPERTIES**

**BOARD SIZE (mm)** 1200 x 2400

**THICKNESS (mm) 20 - 200** 

THERMAL CONDUCTIVITY (λ) 0.022w/mk

**FACERS** Low emissivity foil facers

**CORE WATER VAPOUR RESISTIVITY** ≈ 300MNs/gm

**COMPRESSIVE STRENGTH** >150kPa

**EDGE** Butt Joint

- The wall insulation will be Therm Isoframe manufactured by Therm Ltd, to BS EN 13165-1:2012.
- > Comprising a rigid Polyisocyanate (PIR) core with low emissivity trilaminate aluminium foil facings.
- > Low thermal conductivity, minimising the thickness required to achieve the design U-value.
- > Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)
- > Achieves an A+ rating when compared to the BRE Green Guide.
- > To be installed in accordance with the instructions of Therm Ltd. and conditions set out in the BBA Certificate 07/4444.

## **MANNOK THERM LAMINATE-FOIL / MLF**



Mannok Therm Laminate-Foil / MLF PIR insulation is a high performance, fibre free insulated board, suitable dry-lining walls. It has a low emissivity composite foil facing on the inner side and plasterboard on the outer side.

The low emissivity foil facing increases the thermal resistance of an unvented cavity adjacent to the board improving the overall thermal performance of the element. It also minimises the board thickness required to achieve the design U-value.

## **PERFORMANCE & PROPERTIES**

**BOARD SIZE (mm)** 1200 x 2400

**THICKNESS (mm)** 27.5 - 92.5

THERMAL CONDUCTIVITY (λ) 0.022w/mk

**FACERS** Plasterboard on outer face, compositor foil face on inner face

**CORE WATER VAPOUR RESISTIVITY** ≅ 300MNs/gm

**COMPRESSIVE STRENGTH** > 150kPa

- > Enables thermal insulation and internal finish to be applied in one operation
- Certified under BBA certificate number 07/4444 and IAB certificate number 05/0223
- Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)
- Achieves an A+ rating when compared to the BRE Green Guide)

## **MANNOK THERM LAMINATE-KRAFT / MLK**



Mannok Therm Laminate-Kraft / MLK PIR is a high performance, fibre free insulated board, with a kraft paper facing on one side and plasterboard bonded to the other side.

Mannok Therm Laminate-Kraft / MLK PIR insulation is ideally suited to be used under rafters to reduce the overall heat loss through the roof and eliminate thermal bridging through the rafters.

With the additional benefit of its paper facer, Mannok Therm Laminate-Kraft / MLK PIR insulation is also suitable for use in dry-lining applications fixed in place using dot-and-dab adhesive or mechanical fixings.

## **PERFORMANCE & PROPERTIES**

**BOARD SIZE (mm)** 1200 x 2400

**THICKNESS (mm)** 27.5 - 92.5

THERMAL CONDUCTIVITY (λ) 0.022w/mk

**FACERS** Low emissivity foil facers

**CORE WATER VAPOUR RESISTIVITY** ≈ 300MNs/gm

**COMPRESSIVE STRENGTH** > 150kPa

- > Enables thermal insulation and internal finish to be applied in one operation
- Certified under BBA certificate number 07/4444 and IAB certificate number 05/0223
- Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)
- Achieves an A+ rating when compared to the BRE Green Guide

## **MANNOK THERM ROOF / MR**



Mannok Therm Roof / MR PIR insulation is high performance, fibre free board, with a rigid thermoset insulation core faced on both sides with a low emissivity composite foil facing.

These low emissivity facings increases its thermal resistance of unventilated air space adjacent to the insulation, improving the roof's overall thermal performance.

Designed for warm pitched or ventilated cold flat roof constructions on new build projects or on refurbishment projects where the roof is to be stripped and re-covered.

## **PERFORMANCE & PROPERTIES**

**BOARD SIZE (mm)** 1200 x 2400

**THICKNESS (mm) 20 - 200** 

THERMAL CONDUCTIVITY (λ) 0.022w/mk

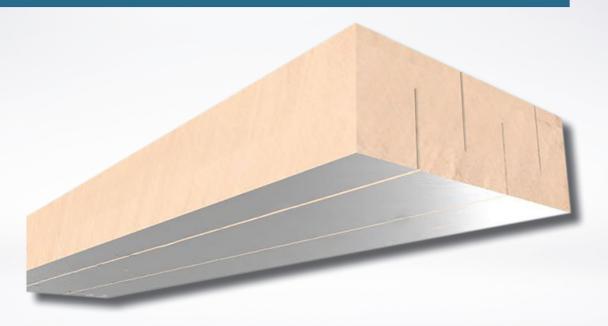
**FACERS** Low emissivity foil facers

**CORE WATER VAPOUR RESISTIVITY** ≈ 300MNs/gm

**COMPRESSIVE STRENGTH** > 150kPa

- Low thermal conductivity, minimising the thickness required to achieve the design U-value and reducing the loads applied to the fixings
- Certified under BBA certificate number 07/4444 and IAB certificate number 05/0223
- Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)
- > Achieves an A+ rating when compared to the BRE Green Guide

## **MANNOK THERM EASI-DORM**



Mannok Therm EASI-DORM is a PIR insulation core (polyisocyanurate) between low emissivity aluminium foil facings. It is used in pitched roof applications where the board design enables a tight fit between rafters due to its width adjustment feature.

## **PERFORMANCE & PROPERTIES**

**BOARD SIZE (mm)** 360 X 1200

THICKNESS (mm) 75, 100, 125, 150

THERMAL CONDUCTIVITY (λ) 0.022w/mk

**FACERS** Low emissivity foil facers

**CORE WATER VAPOUR RESISTIVITY** ≈ 300MNs/gm

**COMPRESSIVE STRENGTH** > 150kPa

- > Easy to Install
- Cost Effective to Use
- > Reduction in Waste

## **MANNOK THERM ROOF / MFR-FFR**



Mannok Therm Roof / MFR-FFR PIR insulation is high performance, fibre free board, with a rigid thermoset insulation core and faced on both sides with a low emissivity composite foil facing.

The low thermal conductivity, minimising the thickness required to achieve the design U-value.

Mannok Therm Roof / MFR-FFR PIR insulation boards are compatible with metal, concrete and timber deck constructions.

## **PERFORMANCE & PROPERTIES**

**BOARD SIZE (mm)** 1200 x 2400

**THICKNESS (mm) 25 - 150** 

THERMAL CONDUCTIVITY (λ) 0.022w/mk

**FACERS** Low emissivity foil facers

**CORE WATER VAPOUR RESISTIVITY** ≈ 300MNs/gm

**COMPRESSIVE STRENGTH** > 150kPa

- > LPCB approved to LPS 1181:Part 1 for built up cladding systems for use as the external envelope of the building. Contact the technical department for further details.
- Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)
- > Achieves an A+ rating when compared to the BRE Green Guide.

## **MANNOK THERM ROOF / MFR-GFR**



Mannok Therm Roof / MFR-GFR PIR insulation is a high performance, fibre free board, with a rigid thermoset insulation core and faced with a mineral coated, perforated, glass tissue.

Mannok Therm Roof / MFR-GFR PIR insulation is suitable for use in both new build and refurbishment projects.

## **PERFORMANCE & PROPERTIES**

**BOARD SIZE (mm)** 600 x 1200

**THICKNESS (mm) 25 - 150** 

#### THERMAL CONDUCTIVITY (λ)

25mm-79mm = 0.026w/mk 80mm-119mm = 0.025w/mk 120mm-150mm = 0.024w/mk

FACERS Mineral coated, perforated, glass tissue facing

**CORE WATER VAPOUR RESISTIVITY** ≈ 300MNs/gm

**COMPRESSIVE STRENGTH** >150kPa

- > LPCB approved to LPS 1181:Part 1 for built up cladding systems for use as the external envelope of the building
- > Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)

## **MANNOK THERM ROOF / MFR-DPFR**



Mannok Therm Roof / MFR-DPFR is a high performance, fibre free board, with a rigid thermoset insulation core and faced with fleece-finished, bitumen facing on one side and a mineral coated, perforated, glass tissue facing on the other side.

## **PERFORMANCE & PROPERTIES**

**BOARD SIZE (mm)** 600 x 1200

**THICKNESS (mm) 25 - 150** 

THERMAL CONDUCTIVITY (λ) 80 - 119mm: 0.024W/mK, 120mm-150mm = 0.024w/mk

**FACERS** Fleece-finished, bitumen facing on one side. Mineral coated, perforated, glass tissue facing on the other side.

**CORE WATER VAPOUR RESISTIVITY** ≈ 300MNs/gm

**COMPRESSIVE STRENGTH** > 150kPa

## **SPECIFICATION**

> Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)

## **MANNOK THERM ROOF / MFR-PLY**



Mannok Therm Roof / MFR-PLY PIR insulation is a high performance, fibre free board, with a rigid thermoset insulation core and faced with a low emissivity composite foil facing on the inner side and 6mm water and boil proof (WBP) plywood on the outer.

The low thermal conductivity, minimises the thickness required to achieve the design U-value while the composite board offers rapid coverage and straightforward installation.

Mannok Therm Roof / MFR-PLY PIR insulation boards allow for the installation of a roof structure in one operation, as the product provides the deck, insulation and vapour control layer all-in-one.

Mannok Therm Roof / MFR-PLY PIR insulation is compatible with a wide variety of weathering systems as it helps reduce the risk of condensation and eliminates the need for ventilation beneath the deck.

## **PERFORMANCE & PROPERTIES**

**BOARD SIZE (mm)** 1200 x 2400

THICKNESS (mm) 76, 96, 116, 126, 131

THERMAL CONDUCTIVITY (λ) 0.022w/mk

FACERS Composite foil and WPB plywood

**CORE WATER VAPOUR RESISTIVITY** ≈ 300MNs/gm

**COMPRESSIVE STRENGTH** > 150kPa

- > Warm roof construction reduces the risk of condensation within the roof structure and eliminates the need for ventilation beneath the deck.
- Zero ozone depletion potential (zero ODP) and low global warming potential (GWP)
- > Achieves an A+ rating when compared to the BRE Green Guide.

# WESTERN



The Western is our original flat, smooth surfaced interlocking design tile.

It is available in multiple colours and is the obvious choice for cost effective projects.

The Western tile maintains a uniform appearance with machine formed edges that are enhanced by a broken bond laying pattern.

## **PERFORMANCE & PROPERTIES**

**SIZE (mm)** 420 x 334

LINEAR COVER (mm) 300 x 302

MINIMUM PITCH (°) 17.5°

MAXIMUM PITCH (°) 90°

WEIGHT PER TILE (KG) 5kg appox

WEIGHT PER 1,000 TILES 5 tonnes approx

## **COLOURS**





# **DEVENISH**



The Devenish has a finely detailed textured surface and is available in two colours of Black and Blue/Black.

Quality comes naturally to this product and is a pleasure for both the specifier and the end user. Highly versatile, it is equally suitable for new build projects or the refurbishment of old style buildings.

## **PERFORMANCE & PROPERTIES**

**SIZE (MM)** 420 x 334

LINEAR COVER (MM) 300 x 302

MINIMUM PITCH (°) 17.5°

## **COLOURS**

MAXIMUM PITCH (°) 90°

**SURFACE** Riven Texture

WEIGHT PER TILE (KG) 4.6kg appox

WEIGHT PER 1,000 TILES 4.6 tonnes approx







Blue Black



# **LOCH ERNE**



Our double Pantile forms a gentle flowing pattern that gives instant visual appeal and is available in multiple colours.

It performs on pitches as low as 17.5° and combines its exceptional strength and beautiful smooth surface with stunning aesthetics.

## **PERFORMANCE & PROPERTIES**

**SIZE (MM)** 420 x 334

LINEAR COVER (MM) 300 x 302

MINIMUM PITCH (°) 17.5°

MAXIMUM PITCH (°) 90°

**SURFACE** Smooth

WEIGHT PER TILE (KG) 5kg appox

WEIGHT PER 1,000 TILES 5 tonnes approx

## **COLOURS**



# **RIDGE TILES**

HALF ROUND RIDGE





UNIVERSAL ANGLE RIDGE

## **COLOURS**

## **Half Round Ridge**

Slate Grey



Graphite



Clay Red



Turf Brown



Rustic Mix



Matt Black

## **Universal Angle Ridge**



Slate Grey



Graphite



Clay Red



Turf Brown



Rustic Mix

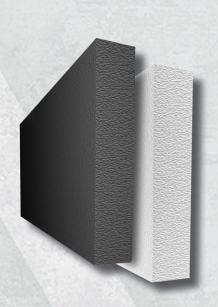


Matt Black



Blue Black

# MANNOK OUR PRODUCT RANGE



**EPS INSULATION** 



**CEMENT** 



PIR INSULATION



**ROOF TILES** 



AIRCRETE BLOCKS

BUILD WITH CONFIDENCE; BUILD WITH CONSCIENCE.

IT'S MANNOK MADE.

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