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Product Guide

Fatra Two Layer Felt System

Fatra product guide

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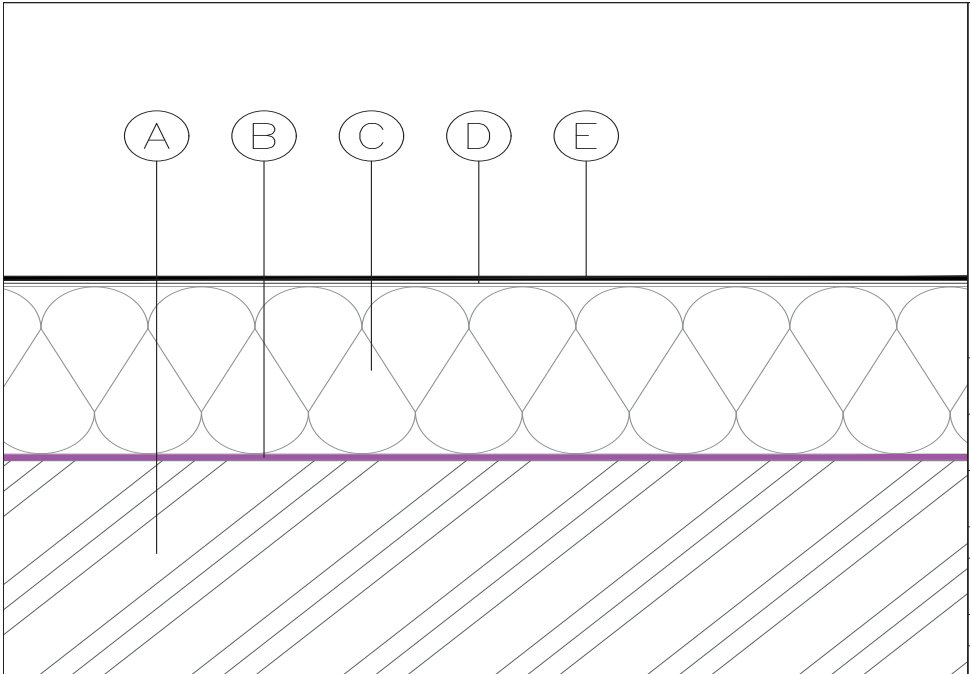
System Information

The Fatra Two Layer Felt membranes are applied by torch on application. They offer a rapid and simple application of roofing membranes. Installed by skilled and trained operatives, the system provides a simplified waterproofing solution to a wide range of roofing applications and substrates. The torch on membranes provide additional certainty of water tightness due to the homogeneous bonding of the bitumen throughout.

Fatra Two Layer Felt Warm Roof System Build Up:

- **Capsheet** - Fatra FF825 Torch On Felt Capsheet (E)
- **Underlayer** - Fatra FF819 Torch On Felt Underlayer (D)
- **Insulation** - Xtratherm FR/BGM rigid PIR insulation (or equal approved), bonded with Fatra FF867 or Fatra FF867C Insulation Adhesive (C)
- **Vapour Control Layer** - Fatra FF820 Torch On Felt VCL (B)
- **Substrate** - Metal, Concrete or Timber, primed with Fatra FF817 Primer as required (A)

Standard Detail - Warm Roof Build Up



Product Information

Felts

Product	Roll Size	Thickness	Weight	Rolls Per Pallet
Fatra FF825 Torch On Felt Capsheet	1m x 8m	4.0mm	5.0kg/m ²	27
Fatra FF819 Torch On Felt Underlayer	1m x 8m	2.5mm	3.0kg/m ²	36
Fatra FF820 Torch On Felt VCL	1m x 16m	2.0mm	2.5kg/m ²	27

Primer & Adhesives

Product	Can Size	Coverage
Fatra FF817 Primer	25 litres	6m ² per litre (up to 150m ² per can)
Fatra FF867 Insulation Adhesive	6 litres	5m ² per litre (up to 30m ² per can)
Fatra FF867C Insulation Adhesive	18.5kg	150m ² to 200m ² per canister



Fatra FF825 Torch On Felt Capsheet

Description: The Fatra FF825 is a torch applied capsheet with a charcoal black slate granular finish which provides great protection from membrane aging due to UV rays. The capsheet has a 75mm selvedge which facilitates bonding of the side laps. It consists of a special compound based on distilled bitumen which is modified with elastomers. This high content of polymer modified SBS is strengthened with 250g/m² linear-reinforced spun bond polyester. The reinforced modified bitumen blend assures good flexibility at low temperatures, excellent adhesion and great dimensional stability for use as a capsheet.

Product Make Up: Flamina, SBS, 250g/m² polyester reinforcement, SBS, Slate Mineral Finish.

Use: The Fatra FF825 is intended for use as a torch on capsheet in a built-up roofing system.

Application: This felt membrane is torch applied to the Fatra FF819 Torch On Felt Underlayer. Ensure the surface of the underlayer is dry and clean. The Fatra FF825 felt is then welded down using a propane gas burner and burning off the underside film and melting down the bituminous undercoating. Minimum overlaps have to be welded by torching; side laps of 75mm and end laps of minimum 100mm.



Fatra FF825 Torch On Felt Capsheet

Declared Performance:

Test	Standard	Performance
EN13707-2009		
External Fire Performance	UNI EN 13501-5	Froof
Reaction To Fire	UNI EN 13501-1	E
Watertightness	UNI EN 1928 (B)	60 kPa>=
Tensile properties	UNI EN 12311-1	700/500 N/5cm -20% 40/45%- 15%(v.a.)
Resistance to root penetration	UNI EN 13948	NPD
Resistance to static loading Meth A	UNI EN 12730 Meth A	15 kg >=
Resistance to impact	UNI EN 12691	1250 mm >=
Resistance to tearing (nail shank)	UNI EN 12310-1	160/200 N - 30%
Peel resistance of joints	UNI EN 12316-1	NPD
Shear resistance of joints	UNI EN 12317-1	600/400 N/5cm -20% or out
Flexibility at low temperature after aging	EN 1296 e EN 1109	-10°C +10°C
Flow resistance at elevated temperature after ageing	EN 1296 e EN 1110	NPD
Artificial ageing by long term exposure to UV ray	EN 1297 e EN 1850-1	NPD
Flexibility at low temperature	UNI EN 1109	-20/-20°C <=
Flow resistance at elevated temperature	UNI EN 1110	100°C >=
Hazardous Substances	Hazardous Substances	Note A*

*** Note A**

This Product does not contain asbestos or tar constituents. In the absence of a uniform test method throughout Europe, any verifications and declarations on release/content must be performed considering the national regulations of the country of use.



Fatra FF819 Torch On Felt Underlayer

Description: The Fatra FF819 is a torch applied underlayer finished with a thermos-fusible film on both sides. It consists of a special compound based on distilled bitumen which is modified with elastomers. This high content of polymer modified SBS is strengthened with 190g/m² linear-reinforced spun bond polyester. The reinforced modified bitumen blend assures good flexibility at low temperatures, excellent adhesion and great dimensional stability for use as an underlayer.

Product Make Up: Flamina, SBS, 190g/m² polyester reinforcement, SBS, Flamina.

Use: The Fatra FF819 is intended for use as a torch on underlayer in a built-up roofing system.

Application: This felt membrane is torch applied to a suitable insulation board in a warm roof build. In a cold roof build up, the substrate must be primed with Fatra FF817 Primer (coverage 6m² per litre) to receive the Fatra FF819 Torch On Felt Underlayer. The felt is then welded down using a propane gas burner and burning off the underside film and melting down the bituminous undercoating. Minimum overlaps have to be welded by torching; side laps of 75mm and end laps of 100mm.



Fatra FF819 Torch On Felt Underlayer

Declared Performance:

Test	Standard	Performance
EN13707-2009		
External Fire Performance	UNI EN 13501-5	Froof
Reaction To Fire	UNI EN 13501-1	E
Watertightness	UNI EN 1928 (B)	60 kPa>=
Tensile properties	UNI EN 12311-1	400/300 N/5cm - 20% 40/45% - 15%(v.a.)
Resistance to root penetration	UNI EN 13948	NPD
Resistance to static loading Meth A	UNI EN 12730 Meth A	10 kg >=
Resistance to impact	UNI EN 12691	1000 mm >=
Resistance to tearing (nail shank)	UNI EN 12310-1	140/140 N - 30%
Peel resistance of joints	UNI EN 12316-1	NPD
Shear resistance of joints	UNI EN 12317-1	350/250 N/5cm -20%
Flexibility at low temperature after aging	EN 1296 e EN 1109	NPD-
Flow resistance at elevated temperature after ageing	EN 1296 e EN 1110	NPD
Artificial ageing by long term exposure to UV ray	EN 1297 e EN 1850-1	NPD
Flexibility at low temperature	UNI EN 1109	-15/-15°C <=
Flow resistance at elevated temperature	UNI EN 1110	100°C >=
Hazardous Substances	Hazardous Substances	Note A
EN13969-2007		
Reaction To Fire	UNI EN 13501-1	E
Watertightness	UNI EN 1928 (B)	60 kPa>=
Resistance to impact	UNI EN 12691	1000 mm >=
Shear resistance of joints	UNI EN 12317-1	350/250 N/5cm -20%
Flexibility at low temperature	UNI EN 1109	-15/-15°C <=
Flow resistance at elevated temperature	UNI EN 1110	100°C
Tensile properties	UNI EN 12311-1	400/300 N/5cm - 20% 40/45% - 15%(v.a.)
Resistance to static loading Meth A	UNI EN 12730 Meth A	10 kg >=
Resistance to static loading Meth B	UNI EN 12730 Meth B	NPD
Resistance to tearing (nail shank)	UNI EN 12310-1	140/140 N - 30%
Water penetration after ageing	EN 1296 e EN 1928 (A)	NPD
Hazardous Substances	Hazardous Substances	Note A

*** Note A**

This Product does not contain asbestos or tar constituents. In the absence of a uniform test method throughout Europe, any verifications and declarations on release/content must be performed considering the national regulations of the country of use.

Fatra FF820 Torch On Felt Vapour Control Layer

Description: The Fatra FF820 is a torch applied VCL finished with a thermos-fusible film on the underside and a sanded finish to the upper-side. It consists of a special compound based on distilled bitumen which is modified with elastomers. This high content of polymer modified SBS is strengthened with 80g/m² linear-reinforced spun bond polyester. The reinforced modified bitumen blend assures good flexibility at low temperatures, excellent adhesion and great dimensional stability for use as a VCL.

Product Make Up: Flamina, SBS, 80g/m² polyester reinforcement, SBS, Sand Finish.

Use: The Fatra FF820 is intended for use as a torch on VCL in a built-up roofing system.

Application: This felt membrane is torch applied to a suitable structural deck. Ensure the substrate is a suitably primed with Fatra FF817 Primer (coverage 6m² per litre). Once the roof surfaces have been primed, the felt is then welded down using a propane gas burner and burning off the underside film and melting down the bituminous undercoating. Minimum overlaps have to be welded by torching; side laps of 75mm and end laps of 100mm.



Fatra FF820 Torch On Felt Vapour Control Layer

Declared Performance:

Test	Standard	Performance
EN13707-2009		
External Fire Performance	UNI EN 13501-5	Roof
Reaction To Fire	UNI EN 13501-1	E
Watertightness	UNI EN 1928 (B)	60 kPa>=
Tensile properties	UNI EN 12311-1	300/200 N/5cm - 20% 2/2% - 1%(v.a.)
Resistance to root penetration	UNI EN 13948	NPD
Resistance to static loading Meth A	UNI EN 12730 Meth A	NPD
Resistance to impact	UNI EN 12691	NPD
Resistance to tearing (nail shank)	UNI EN 12310-1	70/70 N - 30%
Peel resistance of joints	UNI EN 12316-1	NPD
Shear resistance of joints	UNI EN 12317-1	300/200 N/5cm - 10%
Flexibility at low temperature after aging	EN 1296 e EN 1109	NPD
Flow resistance at elevated temperature after ageing	EN 1296 e EN 1110	NPD
Artificial ageing by long term exposure to UV ray	EN 1297 e EN 1850-1	NPD
Flexibility at low temperature	UNI EN 1109	-15/-15°C <=
Flow resistance at elevated temperature	UNI EN 1110100°C	
Hazardous Substances	Hazardous Substances	Note A
EN13969-2007		
Reaction To Fire	UNI EN 13501-1	E
Watertightness	UNI EN 1928 (B)	60 kPa>=
Tensile properties	UNI EN 12311-1	300/200 N/5cm - 20% 2/2% - 1%(v.a.)
Resistance to impact	UNI EN 12691	NPD
Shear resistance of joints	UNI EN 12317-1	300/200 N/5cm -10%
Flexibility at low temperature	UNI EN 1109	-15/-15°C <=
Resistance to tearing (nail shank)	UNI EN 12310-1	70/7 N - 30%
Water vapour transmission after ageing	EN 1296 e EN 1931	NPD
Water vapour transmission properties	UNI EN 1931	100000 µ>=
Hazardous Substances	Hazardous Substances	Note A

*** Note A**

This Product does not contain asbestos or tar constituents. In the absence of a uniform test method throughout Europe, any verifications and declarations on release/content must be performed considering the national regulations of the country of use.

Completed Projects



Fatra product guide



Examples of Standard Details

A) Structural deck laid to a 1:80 fall, surface primed with Fatra FF817 Primer as required
 B) Fatra FF820 Torch On Felt Vapour Control Layer 2mm 2.5kg (roll size 1x16m)
 C) Xtratherm FR/BGM rigid PIR insulation (or equal approved), thickness to achieve required U-value, bonded with Fatra FF867 Insulation Adhesive
 D) Fatra FF819 Torch On Felt Underlayer 2.5mm 3kg (roll size 1x6m)
 E) Fatra FF825 Torch On Felt Capsheet 4mm 4kg (roll size 1x6m)
 F) 50 x 50mm treated timber angle fillet
 G) 18mm Class 3 plywood mech fixed to upstand
 H) Damp Proof Course (see face under plywood)
 I) Proprietary Capping System

STANDARD DETAIL

All details must be installed in accordance with BS8217, BS6229 and Fatra recommendations.

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Parapet with Capping
 Fatra Two Layer Felt Standard Detail
 Fatra UK Ltd

DATE: 2018	SCALE: NTS	DRAWN: MDJ
DRAWING NO: FATRA F2F-07		REVISION: -

A) Structural deck laid to a 1:80 fall, surface primed with Fatra FF817 Primer as required
 B) Fatra FF820 Torch On Felt Vapour Control Layer 2mm 2.5kg (roll size 1x16m)
 C) Xtratherm FR/BGM rigid PIR insulation (or equal approved), thickness to achieve required U-value, bonded with Fatra FF867 Insulation Adhesive
 D) Fatra FF819 Torch On Felt Underlayer 2.5mm 3kg (roll size 1x6m)
 E) Fatra FF825 Torch On Felt Capsheet 4mm 4kg (roll size 1x6m)
 F) 50 x 50mm treated timber angle fillet
 G) Xtratherm FR/BGM rigid PIR insulation (or equal approved), bonded with Fatra FF867 Insulation Adhesive
 H) GRP termination bar mech fixed at 250mm centres
 I) Fatra FF857 Silicone Sealant

STANDARD DETAIL

All details must be installed in accordance with BS8217, BS6229 and Fatra recommendations.

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Insulated Upstand with Termination Bar
 Fatra Two Layer Felt Standard Detail
 Fatra UK Ltd

DATE: 2018	SCALE: NTS	DRAWN: MDJ
DRAWING NO: FATRA F2F-11		REVISION: -

Examples of Standard Details

STANDARD DETAIL

All details must be installed in accordance with BS8217, BS6229 and Fatra recommendations.

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High Pitch Ridge Detail
Fatra Two Layer Felt Standard Detail
Fatra UK Ltd

DATE: 2018	SCALE: NTS	DRAWN: MDJ
DRAWING NO: FATRA F2F-19		REVISION: -

STANDARD DETAIL

All details must be installed in accordance with BS8217, BS6229 and Fatra recommendations.

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Cold Pipe Penetration
Fatra Two Layer Felt Standard Detail
Fatra UK Ltd

DATE: 2018	SCALE: NTS	DRAWN: MDJ
DRAWING NO: FATRA F2F-22		REVISION: -

Examples of Standard Details

A) Structural deck laid to a 1:80 fall, surface primed with Fatra FF817 Primer as required
 B) Fatra FF820 Torch On Felt Vapour Control Layer 2mm 2.5kg (roll size 1x10m)
 C) Xtratherm FR8GM rigid PIR insulation (or equal approved), thickness to achieve required U-Value, bonded with Fatra FF867 Insulation Adhesive
 D) Fatra FF819 Torch On Felt Underlayer 2.5mm 3kg (roll size 1x8m)
 E) Fatra FF825 Torch On Felt Capsheet 4mm 5kg (roll size 1x8m)
 F) Timber head edge mesh fixed to structural deck G) 80 x 50mm treated timber angle fillet
 H) Metal rain water outlet with clamping ring and lead grate

STANDARD DETAIL

All details must be installed in accordance with BS8217, BS8229 and Fatra recommendations.

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Vertical Rainwater Outlet
 Fatra Two Layer Felt Standard Detail
 Fatra UK Ltd

DATE: 2018	SCALE: NTS	DRAWN: MDJ
DRAWING NO: FATRA F2F-23	REVISION: -	

A) Structural deck laid to a 1:80 fall, surface primed with Fatra FF817 Primer as required
 B) Fatra FF820 Torch On Felt Vapour Control Layer 2mm 2.5kg (roll size 1x10m)
 C) Xtratherm FR8GM rigid PIR insulation (or equal approved), thickness to achieve required U-Value, bonded with Fatra FF867 Insulation Adhesive
 D) Fatra FF819 Torch On Felt Underlayer 2.5mm 3kg (roll size 1x8m)
 E) Fatra FF825 Torch On Felt Capsheet 4mm 5kg (roll size 1x8m)
 F) Profiled timber check fillet (min 40mm high) mesh fixed to timber insulation stop
 G) Welted drip in Fatra FF825 formed with 80 x 4mm plywood mesh fixed to battens at 150mm centres
 H) Fascia board

STANDARD DETAIL

All details must be installed in accordance with BS8217, BS8229 and Fatra recommendations.

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Check Kerb with Welted Drip
 Fatra Two Layer Felt Standard Detail
 Fatra UK Ltd

DATE: 2018	SCALE: NTS	DRAWN: MDJ
DRAWING NO: FATRA F2F-16	REVISION: -	

Fatra Two Layer Felt Product Reference

Code	Description	Unit/Roll Size	Coverage
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Vapour Control Layer

FF820	2.5kg/m ² Torch On felt VCL with polyester reinforcement (2.0mm thick) 27 rolls per pallet = 432m ² pallet	16m x 1m	16m ²
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Underlayer

FF819	3.0kg/m ² Torch On Felt Underlayer with polyester reinforcement (2.5mm thick) 36 rolls per pallet = 288m ² pallet	8m x 1m	8m ²
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Capsheet

FF825	5.0kg/m ² Torch On Felt Capsheet with polyester reinforcement (4.0mm thick) 27 rolls per pallet = 216m ² pallet	8m x 1m	8m ²
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Primer

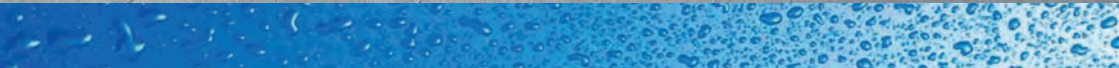
FF817	Substrate Primer to prime Metal, Concrete and Timber surfaces (6m ² per litre)	25 litres	150m ²
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Adhesives

FF867	Insulation adhesive pour applied 5mm beads. 150-300mm centres (5m ² per litre)	6 litres	30m ²
FF867C	Insulation adhesive spray applied 20-40mm beads. 150-300mm centres	18.5kg	150-200m ²

A comprehensive pack of Fatra Two Layer Felt Standard Drawing Details are available. Please contact the office on the details below for more information.

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The information, technical details and instructions included in this literature are correct at the time of publication.