

**BITUGULF**

WATERPROOFING

شركة العوازل الدولية  
International Insulation Company



# Technical Data Sheet

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<b>GULF BOARD (FORMERLY BITUBOARD)</b>	<b>PROTECTION BOARD</b>
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<b>SEALCOAT - D41</b>	<b>PRIMER</b>
<b>AQUAPROOF</b>	<b>PROTECTIVE COATING</b>
<b>AQUAPROOF - 6010</b>	<b>PROTECTIVE COATING</b>
<b>AQUAPROOF - RBE</b>	<b>PROTECTIVE COATING</b>
<b>BITUSILVER</b>	<b>PROTECTIVE COATING</b>
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<b>BILATEX - SBR</b>	<b>BONDING AGENT</b>
<b>BITUSTOP</b>	<b>PVC WATERSTOP</b>
<b>ROOFCRYL</b>	<b>ACRYLIC WATERPROOFING</b>
<b>CATIONIC EMULSION</b>	<b>EMULSION</b>
<b>CUTBACK BITUMEN MC-70</b>	<b>LIQUID BITUMEN</b>

# BITUFLAME - 200<sup>®</sup>

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with Heavy duty non-woven polyester mat

## DESCRIPTION

Bituflame 200 is torch applied membrane manufactured from APP modified distilled bitumen, reinforced with a core of heavy duty non-woven spunbonded polyester fabric, rot- proof and flexible. The polyester gives the membrane its excellent mechanical properties, allows for high tensile, elongation and tear strength. The chemical resistance of Bituflame 200 makes it suitable for tanking applications where aggressive ground water conditions dominate.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- Excellent resistance to aging and weathering
- Flexibility at low temperatures
- Stability at high temperatures
- High tensile strength and tear resistance
- Accommodates structural movements
- Fast, easy and clean application

## SPECIFICATION

Bituflame 200 waterproofing membrane complies with the requirements of ASTM D 6222 type II, Grade S and UEAtc MOAT 30, DIN 52133 International Standards.

### Approvals / Certificates

The product complies with the requirements of P.A for Industry,PAHW,MPW and carries Kuwait Quality Mark. Manufacturing facility is certified with the ISO 9001:2015 QMS, GMP , ISO 14001 EM and ISO 45001 OH & S

## USES

To avoid damp and water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming Pools
- Fountains
- Bathrooms
- Reservoirs
- Bridges
- Drain Gutters
- Tunnels
- Sub-grade structures
- Car Park Deck Slabs

## Technical Data

PROPERTIES	TYPICAL RESULTS	TEST METHOD
Roll Size, m	10 x 1	ASTM D-5147
Thickness, mm	4 ± 0.2	ASTM D-5147
Mass per unit area min. (g/m <sup>2</sup> )	4450	ASTM D-5147
Softening Point	>150	ASTM D-5147
Bottom side coating thickness min. mm	1.0	ASTM D-5147
Tensile Strength, N/5cm (L/T) at 23 ± 2 °C	1000/800	ASTM D 5147 UEAtc M.O.A.T. 30
Lap Joint Strength, N/5cm (L/T)	1000/800	UEAtc M.O.A.T. 30 & 27
Elongation at 23 ± 2 °C (L/T) before and after heat conditioning, at peak load, % minimum	50/55	ASTM D-5147
Tear strength at 23 ± 2 °C N, minimum	356	ASTM D-5147
Low temperature flexibility, before and after heat conditioning in °C	-2 to -5	ASTM D-5147
Dimensional stability % change, maximum	1	ASTM D-5147
Compound stability, in °C minimum	120	ASTM D-5147
Water absorption, % maximum	3.2	ASTM D-5147
Low temperature unrolling, in °C maximum	5	ASTM D-5147



The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# BITUFLAME - 200<sup>®</sup>

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with Heavy duty non-woven polyester mat

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## THICKNESS

Membrane available in different thicknesses (3, 5, 6 mm)

## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth, clean and dry. To make sure it is cleaned from nails, grease, dust, debris, oil, protruding elements etc.

### PRIMING

Apply one coat of primer and we recommend using Bituprimer, Seal Coat D41 or Aquaproof. Allow the primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must be re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position. Each roll must side overlap at least 10 cm, while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15 cm overlap. It is not recommended to use waterproofing membrane in harsh climate conditions, especially high temperature above 45 degrees Celsius.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Marking Aids
- Measuring Tape
- Fire Extinguisher

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available at site. Care should be taken with gas, and torch should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### TECHNICAL SUPPORT

International Insulation Company (IIC) - Bitugulf technical support team consist of expert engineers offers a comprehensive service support to specifiers, end users and contractors, and on-site technical assistance.



### INTERNATIONAL INSULATION COMPANY (BITUGULF) Factory

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**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



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# BITUFLAME - 250

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with heavy duty non-woven polyester mat

## DESCRIPTION

Bituflame 250 is torch applied membrane manufactured from APP modified distilled bitumen, reinforced with a core non-woven spunbonded polyester fabric, rot-proof and flexible. The polyester gives the membrane its excellent mechanical properties, allows for high tensile, elongation and tear strength.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- Excellent resistance to aging and weathering
- Flexibility at low temperatures
- Stability at high temperatures
- High tensile strength and tear resistance
- Accommodates structural movements
- Fast, easy and clean application



## USES

To avoid damp and water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming Pools
- Fountains
- Drain Gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade structures
- Car Park Deck Slabs

## SPECIFICATION

The waterproofing membrane complies with the requirements of ASTM D 6222 type II, Grade S, UEAtc MOAT 30, DIN 52133. International Standards.

### Certificates

The manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 EM and ISO 45001 OH & S



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## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	4 ±0.2	mm	ASTM D-5147
Length	10	M	ASTM D-5147
Width	1	M	ASTM D-5147
Mass/unit area	> 4.0	Kg/m <sup>2</sup>	ASTM D-5147
Coating Asphalt : Type	APP Modified Asphalt		
Softening Point (Ring & Ball)	>150	°C	ASTM D-36
Penetration	12 to 25	dmm	ASTM D-5
Bottom Side Coating Thickness	> 1.0	mm	ASTM D-5147
Tensile strength (L&T) @23±2 °C	1100/900	N/5cm	DIN 52123 UEAtc M.O.A.T. 30 ASTM D 5147
Elongation (L&T) @23±2°C	45/50	%	ASTM D-5147 UEAtc M.O.A.T. 30
Peak Load @ 23± 2°C	> 14	KN/m	ASTM D-5147
Tear resistance (L&T) @23±2°C	700/650	N	ASTM D-4073 ASTM D-5147
Lap joint strength (L&T)	1100/900	N/5cm	UEAtc M.O.A.T. 30 &27
Load strain product: (L&T) @23± 2°C	49500 / 45000		CGSB-37 GP 56M
Puncture Resistance	>1050	N	ASTM E 154
Puncture Resistance	Static : L4 Dynamic : I4		UEAtc M.O.A.T. 27
Hydrostatic pressure @ 5-bar (72.5 psi)	No Leakage		ASTM D-5147
Resistance to Aging after 2000 hours (Accelerated Weathering Tester)	No deterioration		ASTM D 4799
Heat Resistance for 2-hours	No Flow @ 135°C	°C	ASTM D-5147 UEAtc M.O.A.T. 30
Cold Flexibility	0 to -7	°C	ASTM D-5147
Dimension Stability(L&T)	± 0.5	%	ASTM D-5147
Water absorption	<3.2	%	ASTM D-5147
Moisture content	< 0.5	%	ASTM D-5147
Appearance	Nodefects, holes, tears, cracks, blisters		

## THICKNESS

Membrane available in different thicknesses (3, 4, 5 and 6 mm)

# BITUFLAME - 250

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with heavy duty non-woven polyester mat

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## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth, clean and dry. To make sure it is cleaned from nails, grease, dust, debris, oil, protruding elements etc.

### PRIMING

Apply one coat of primer and we recommend using Bituprimer, Seal Coat D41 or Aquaproof. Allow primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must be re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position. Each roll must side overlap at least 10 cm, while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15 cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Marking Aids
- Measuring Tape
- Fire Extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

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# BITUFLAME - 50200

Torch applied APP modified bitumen waterproofing membrane 5mm thick, reinforced with 200 gsm non-woven polyester mat

## DESCRIPTION

Bituflame-50200 is torch applied membrane manufactured from APP modified distilled bitumen, reinforced with a core of non-woven spunbonded polyester fabric, weighing 200-gsm, rot-proof and flexible. The polyester gives the membrane its excellent mechanical properties, allows for high tensile, elongation, and tear strength. The chemical resistance of Bituflame-50200 makes it suitable for tanking applications where aggressive ground water conditions dominate.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- Excellent resistance to aging & weathering
- Flexibility at low temperatures
- Stability at high temperatures
- High tensile strength & tear resistance
- Accommodates structural movements
- Fast, easy and clean application



## USES

To avoid damp & water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming pools
- Fountains
- Drain gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade structures
- Car park deck slabs

## SPECIFICATION

The waterproofing membrane is a high-performance torch applied 5mm thick APP membrane, manufactured from high quality polymer modified bituminous compounds and reinforced with non-woven polyester. The waterproofing membrane Complies with the requirements of ASTM D 6222 type II, grade S.

## Technical Data

PROPERTIES	RESULTS	TEST METHOD
Roll Size	1 x 8 (mtr)	ASTM – D 5147
Thickness	5.0 (mm)	ASTM – D 5147
Mass per unit area	5.0 (Kg/m <sup>2</sup> )	ASTM – D 5147
Reinforcement	200 (g/m <sup>2</sup> )	UEAtc. M.O.A. T.30
Coating Material	APP Modified Bitumen	As standard
Softening Point (R&B)	>155 °C	ASTM – D 36
Penetration at 23 ± 2 °C	12 to 25 - dmm	ASTM – D 5
Tensile Strength (L&T) 23 ± 2 °C	1100 (N/5cm)	ASTM – D 5147
	900 (N/5cm)	ASTM – D 5147
Elongation at break (L&T) 23 ± 2 °C	45%	UEAtc method and DIN52123
	50%	UEAtc method and DIN52123
Tear Resistance (L&T) 23 ± 2 °C	700 (N)	ASTM – D 4073
	600(N)	ASTM – D 4073
Overlap Joint Test (L&T)	1100 (N/5cm)	ASTM – D 5147
	900 (N/5cm)	ASTM – D 5147
Puncture Resistance	1050 (N)	ASTM – E 154
Hydrostatic Pressure @ 5-bar	No Leakage	ASTM – D 5147
Water Absorption	<3.2(%)	ASTM – D 5147
Heat Resistance for 2 hours	No Flow at 125 °C	ASTM – D 5147
Cold Flexibility	No Crack @ -2 to -7 °C	ASTM – D 5147
Dimension Stability (L & T)	± 0.5 (%)	ASTM – D 5147

The information given in this data sheets is the average of test of various samples conducted under lab conditions.  
\*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# BITUGULF - 50200

Torch applied APP modified bitumen waterproofing membrane 5mm thick, reinforced with 200 gsm non-woven polyester mat

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## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth, clean and dry. To make sure it cleaned from nails, grease, dust, debris, oil, protruding elements etc.

### PRIMING

Apply one coat of the recommended primer and we recommend using Bituprimer, SealCoat-D41 or Aquaproof. Allow the primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position. Each roll must side overlap at least 10-cm while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15-cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Protective gloves and goggles
- Marking aids
- Measuring tape
- Fire extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available at site. Care should be taken with gas, and torch should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets one on top of another
- Rolls must always be stacked in a vertical position.

### TECHNICAL SUPPORT

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Clearing the substrate



Application of primer



Prepare the torch & cylinder



Unrolling the membrane



Apply torch on membrane

**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



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# BITUFLAME - 60200

Torch applied APP modified bitumen waterproofing membrane 6mm thick, reinforced with 200 gsm non-woven polyester mat

## DESCRIPTION

Bituflame-60200 is torch applied membrane manufactured from APP modified distilled bitumen, reinforced with a core of non-woven spunbonded polyester fabric, weighing 200- gsm, rot-proof and flexible. The polyester gives the membrane its excellent mechanical properties, allows for high tensile, elongation, and tear strength. The chemical resistance of Bituflame-60200 makes it suitable for tanking applications where aggressive ground water conditions dominate.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- Excellent resistance to aging & weathering
- Flexibility at low temperatures
- Stability at high temperatures
- High tensile strength & tear resistance
- Accommodates structural movements
- Fast, easy and clean application



## USES

To avoid damp & water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming pools
- Fountains
- Drain gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade structures
- Car park deck slabs

## SPECIFICATION

The waterproofing membrane is a high-performance torch applied 6 mm thick APP membrane, manufactured from high quality polymer modified bituminous compounds and reinforced with non-woven polyester. The waterproofing membrane Complies with the requirements of ASTM D 6222 type II, grade S, UEAtc MOAT 30, DIN 52133.

## Technical Data

PROPERTIES	RESULTS	TEST METHOD
Roll Size	1 x 7 (mtr)	ASTM – D 5147
Thickness	6 (mm)	ASTM – D 5147
Mass per unit area	6 (Kg/m <sup>2</sup> )	ASTM – D 5147
Reinforcement	200 (g/m <sup>2</sup> )	UEAtc. M.O.A. T.31
Coating Material	APP Modified Bitumen	As standard
Softening Point (R&B)	>155 °C	ASTM – D 36, UEAtc
Penetration at 23 ± 2 °C	12 to 25 - dmm	ASTM – D 5, UEAtc
Tensile Strength (L&T) 23 ± 2 °C	1150 (N/5cm)	UEAtc method and DIN52123
	950 (N/5cm)	UEAtc method and DIN52123
Elongation at break (L&T) 23 ± 2 °C	50%	UEAtc method and DIN52123
	50%	UEAtc method and DIN52123
Tear Resistance (L&T) 23 ± 2 °C	750 (N)	ASTM – D 4073
	650(N)	ASTM – D 4073
Overlap Joint Test (L&T)	1150 (N/5cm)	UEAtc method and DIN52123
	950 (N/5cm)	UEAtc method and DIN52123
Puncture Resistance	1050 (N)	ASTM – E 154
Hydrostatic Pressure @ 5-bar	No Leakage	ASTM – D 5147
Water Absorption	<3.2(%)	ASTM – D 6222 M-11
Heat Resistance for 2 hours	No Flow at 135 °C	ASTM – D 5147
Cold Flexibility	No Crack @ -10 °C	ASTM – D 5147
Dimension Stability (L & T)	± 0.5 (%)	ASTM – D 5147

The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# BITUFLAME - 60200

Torch applied APP modified bitumen waterproofing membrane 6mm thick, reinforced with 200 gsm non-woven polyester mat

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## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth, clean and dry. To make sure it cleaned from nails, grease, dust, debris, oil, protruding elements etc.

### PRIMING

Apply one coat of the recommended primer and we recommend using Bituprimer, SealCoat-D41 or Aquaproof. Allow the primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position. Each roll must side overlap at least 10-cm while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15-cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Protective gloves and goggles
- Marking aids
- Measuring tape
- Fire extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available at site. Care should be taken with gas, and torch should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets one on top of another
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

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Clearing the substrate



Application of primer



Prepare the torch & cylinder



Unrolling the membrane



Apply torch on membrane

**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



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# BITUFLAME - DR

Torch applied APP modified bitumen waterproofing membrane 5 mm thick reinforced with a combination of Polyester and Glass Fiber, Complies with ASTM D - 6223 Type II Grade S

## DESCRIPTION

Bituflame - DR is torch applied waterproofing membrane manufactured from APP modified distilled bitumen, reinforced with a combination of non-woven polyester fabric and glass fiber mat. The polyester gives the membrane its excellent mechanical properties, allows for high tensile, elongation and tear strength. The glass fiber provides dimensional stability.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- Excellent resistance to aging and weathering
- High Flexibility at low temperatures
- Stability at high temperatures
- High tensile strength and tear resistance
- Accommodates structural movements
- Fast, easy and clean application
- Heavy duty reinforcement carriers provide anti-root characteristics.



## USES

To avoid damp and water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming Pools
- Fountains
- Drain Gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade structures
- Car Park Deck Slabs

## SPECIFICATION

The Bituflame DR waterproofing membrane complies with the requirements of ASTM D 6223 type II, Grade S, UEAtc MOAT 30, DIN 52133

### Certificates

The manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 E M and ISO 45001 O H & S.

## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	5	mm	ASTM D-5147
Length	8	M	ASTM D-5147
Width	1	M	ASTM D-5147
Mass/unit area	5.4	Kg/m <sup>2</sup>	ASTM D-5147
Coating Asphalt: Type	APP Modified Asphalt		
Softening Point (Ring & Ball)	>155	°C	ASTM D-36
Penetration	15 to 35	dmm	ASTM D-5
Tensile strength at 23°C±2 (L/T)	1200/1000	N/5cm	UEAtc M.O.A.T. 30, ASTM D-5147
Elongation at 23°C±2 (L/T)	45/50	%	UEAtc M.O.A.T. 30, ASTM D-5147
Tensile Strength, at -18°C±2 (L/T)	35	KN/m	ASTM D-5147
Elongation, at -18°C±2 (L/T)	3	%	ASTM D-5147
Tear Resistance, N (L/T)	700/500	N	ASTM D 4073
Lap Joint Strength, N/5cm (L/T)	Same as Membrane	N/5cm	UEAtc M.O.A.T 30 & 27
Load Strain Product: L & T	54000 50000		CGSB 37-GP 56 M
Cold Flexibility at -5 to -10°C	No Cracking	°C	UEAtc M.O.A.T 30
Heat Resistance at 135 °C	No Flowing	°C	ASTM D-5147
Resistance to Water Pressure	No Leakage		DIN 52123
Water absorption, %	< 3.2	%	ASTM D-5147
Static puncture resistance	L4 (25 kg)		UEAtc MOAT 27
Dynamic puncture resistance	I4 (4-6 mm)		UEAtc MOAT 27
Dimensional stability	< 1	%	ASTM D-5147
Moisture content	< 1	%	ASTM E 96
Resistance to aging after 2000 hrs	No deteriorations	%	ASTM D 4799

The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# BITUFLAME - DR

Torch applied APP modified bitumen waterproofing membrane 5 mm thick reinforced with a combination of Polyester and Glass Fiber, Complies with ASTM D - 6223 Type II Grade S

**BITUGULF**  
WATERPROOFING

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International Insulation Company

## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth and free from all harmful objects and thoroughly cleaned from (nails, Grease, dust, debris, oil, protruding elements etc.)

### PRIMING

Apply liberal coat of the recommended primer and we recommend using Bituprimer, Seal Coat D41 and Aquaproof allowed primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position where it is to be torched on later. Each roll must side overlap at least 10 cm while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15 cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Marking Aids
- Measuring Tape
- Fire Extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

International Insulation Company (IIC) - Bitugulf technical support team consist of expert engineers offers a comprehensive service support to specifiers, end users and contractors, and on-site technical assistance.

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**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



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# BITUFLAME - SL

Torch applied APP modified bitumen waterproofing membrane reinforced with polyester complies with ASTM D - 6222 Type II Grade G

## DESCRIPTION

Bituflame SL is high performance waterproofing membrane, produced with a layer of natural slate flakes on weathering side to protect the membrane from UV radiation and ageing.

Produced in highly controlled process, the reinforcement made of non-woven spunbonded polyester and straight run bitumen modified with selected APP polymers and stabilizers.

## FEATURES

- Positive barrier to water and dampness
- Excellent resistance to ageing and atmospheric agents
- Accommodates structural movements
- Designed for use in exposed system
- Provided with lap strip
- Resistant to water-borne chemical attack
- Stability at high temperatures
- Excellent puncture and tear resistance
- Excellent resistance to UV rays, aging and weathering
- Easy for application and repair works



## USES

Bituflame SL is ideal to use for new and re-roofing applications. It can be used in almost every waterproofing application which includes roofs, balconies, basements, reservoirs, bridges, tunnels, lining for sewage canals, sub-grade structures etc.

## STANDARDS

Complies with the requirements of ASTM D - 6222 Type II Grade G

### Certificates

The manufacturing facility is certified with the ISO 9001:2015 QMS, GMP ISO 14001 EM and ISO 45001 O H & S .

## THICKNESS

Membrane available in different thicknesses (3, 5, 6 mm)

## Technical Data

PROPERTIES	TYPICAL RESULTS	TEST METHOD
Appearance	Nodefects, holes, tears, cracks or blisters	ASTM D-5147
Roll Size, m	10 x 1	ASTM D-5147
Thickness min., mm	4	ASTM D-5147
Mass per unit area min. (g/m <sup>2</sup> )	4882	ASTM D-5147
Bottom side coating thickness min. mm	1.0	ASTM D-5147
Peak load at 23 ± 2 °C (L/T) before and after heat conditioning, KN/m minimum	14	ASTM D-5147
Elongation at 23 ± 2 °C (L/T) before and after heat conditioning, at peak load, % minimum	40/45	ASTM D-5147
Peak load at -18 ± 2 (L/T), KN/m, minimum	15.8	ASTM D-5147
Elongation at -18 ± 2 °C (L/T), at peak load, % minimum	15	ASTM D-5147
Elongation at 5% of Maximum load at 23 ± 2 °C (L/T), % minimum	50	ASTM D-5147
Tear strength at 23 ± 2 °C N, minimum	356	ASTM D-5147
Low temperature flexibility, before and after heat conditioning in °C, maximum	0	ASTM D-5147
Dimensional stability % change, maximum	1	ASTM D-5147
Compound stability, °C minimum	120	ASTM D-5147
Granule embedment, maximum loss, grams	2	ASTM D-5147
Water absorption, % maximum	3.2	ASTM D-5147
Moisture content, % maximum	< 1	ASTM D-5147
Low temperature unrolling, °C maximum	5	ASTM D-5147

## PRIMING

Apply one coat of the recommended primer and we recommend using Sealcoat D41. Allow the primer coat to dry until it is tack free. Prior to application of the membrane, all surfaces must be re-primed if left more than 24 hours.

The information given in this data sheets is the average of test of various samples conducted under lab conditions.  
\*In accordance to ASTM and UEATc Standards results are subjected to 5 to 20% tolerance.

# BITUFLAME - SL

Torch applied APP modified bitumen waterproofing membrane reinforced with polyester complies with ASTM D - 6222 Type II Grade G

**BITUGULF**  
WATERPROOFING

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## INSTRUCTION TO USE

### SURFACE CLEANING

The surface must be thoroughly cleaned and should be free from dust, debris, oil and protruding elements.

### FIXING INSTRUCTION

The installation should start from one edge/end of the surface. Unroll one roll over the surface with minimum 10 cm side lap alignment. Fixing should be either loose laid or fully bonded.

#### Loose Laid

Re-roll the unrolled membrane to a length suitable for application without changing the orientation. Melt minimum 10 cm from the edges. Fix the melt portion firmly to the pre-primed surface. Position the subsequent rolls, give edge overlapping of minimum 10 cm, side overlapping of minimum 10 cm and continue until the area is fully fixed. The melted compound should be spread with a trowel or roller to ensure a smooth tight seal.

#### Fully Bonded

Melt the lower surface of the membrane with a gas torch by moving the flame across the entire width of the roll. Fix the melt portion firmly to the pre-primed surface. The subsequent rolls should be done in the same manner as of loosed laid membrane.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife / Cutter
- Trowel with a rounded tip
- Protective gloves and goggles
- Marking aids
- Measuring tape
- Fire extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torch should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

International Insulation Company (IIC) - Bitugulf technical support team consist of expert engineers offers a comprehensive service support to specifiers, end users and contractors, and on-site technical assistance.

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# BITUBOND - PLAIN

Torch applied APP modified bitumen waterproofing membrane 4mm thick, reinforced with non-woven polyester mat

## DESCRIPTION

Bitubond Plain is an APP and special polymers modified bituminous membrane with additives to perform as a general-purpose waterproofing product. The multilayered membrane consists of a spun bonded non-woven polyester core, impregnated and both sides coated with a uniquely formulated polymer modified bituminous compound to meet the best performance at the economic cost.

## ADVANTAGES

- Positive barrier to water ingress and dampness good tensile strength and tear strength.
- Flexibility at low temperatures
- Good tensile strength and tear resistance
- Accommodates structural movements
- Resistance towards salts and water-borne chemicals.
- Outstanding bonding ability and seam integrity, fast, easy and clean application.

## SPECIFICATION

Bitubond Plain waterproofing membrane complies with the requirements of ASTM D 6222 type II, Grade S, UEAtc MOAT 30, DIN 52133 International Standards.

### Certificates

The Manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 EM and ISO 45001 OH & S.

## USES

To avoid damp and water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming Pools
- Fountains
- Drain Gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade Structures
- Car Park Deck Slabs



## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	4 ±0.2	mm	ASTM D-5147
Length	10	Meter	ASTM D-5147
Width	1	Meter	ASTM D-5147
Mass/unit area	4.2 ±0.2	Kg/m <sup>2</sup>	ASTM D-5147
Softening Point (Ring & Ball)	>150	°C	ASTM D-36
Penetration	12 to 20	dmm	ASTM D-5
Bottom Side Coating Thickness	> 1	mm	ASTM D-5147
Tensile strength (L&T) @23±2 °C	700/600	N/5c m	DIN 52123 UEAtc M.O.A.T. 30 ASTM D 5147
Elongation (L&T) @23±2 °C	38/38	%	ASTM D-5147 UEAtc M.O.A.T. 30
Tear resistance (L&T) @23±2°C	500/400	N	ASTM D-4073 ASTM D-5147
Lap joint strength (L&T)	700/600	N/5c m	UEAtc M.O.A.T. 30 &27
Load strain product: (L&T)	26600 22800		CGSB-37 GP 56M
Puncture Resistance	600	N	ASTM E 154
Puncture Resistance	Static : I <sub>4</sub> Dynamic : I <sub>4</sub>		UEAtc M.O.A.T. 27
Hydrostatic pressure@ 5-bar (72.5 psi)	No Leakage		ASTM D-5147
Resistance to Aging after 2000 hours (Accelerated Weathering Tester)	No deterioration		ASTM D 4799
Heat Resistance for 2-hours	No Flow @ 125°C	°C	ASTM D-5147 UEAtc M.O.A.T. 30
Cold Flexibility	0 to -5 °C	°C	ASTM D-5147
Dimension Stability(L&T)	± 0.5	%	ASTM D-5147
Water absorption	<3.2	%	ASTM D-5147
Moisture content	< 0.5	%	ASTM D-5147

The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# BITUBOND - PLAIN

Torch applied APP modified bitumen waterproofing membrane 4mm thick, reinforced with non-woven polyester mat

**BITUGULF**  
WATERPROOFING

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International Insulation Company

## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth, clean and dry. To make sure it is cleaned from nails, grease, dust, debris, oil, protruding elements etc.

### PRIMING

Apply one coat of primer and we recommend using Bituprimer. Allow primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must be re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position. Each roll must side overlap at least 10 cm, while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15 cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Marking Aids
- Measuring Tape
- Fire Extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other's.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

International Insulation Company (IIC) - Bitugulf technical support team consist of expert engineers offers a comprehensive service support to specifiers, end users and contractors, and on-site technical assistance.

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**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



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# BITUBOND - 200

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with non-woven polyester mat

## DESCRIPTION

Bitubond 200 is an APP and special polymers modified bituminous membrane with additives to perform as a general purpose waterproofing product. The multilayered membrane consists of a spun bonded non-woven polyester core, impregnated and both sides coated with a uniquely formulated polymer modified bituminous compound to meet the best performance at the economic cost.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- good tensile strength and tear strength.
- Flexibility at low temperatures
- Good tensile strength and tear resistance
- Accommodates structural movements
- Resistance towards salts and water-borne chemicals.
- Outstanding bonding ability and seam integrity, fast, easy and clean application.

## SPECIFICATION

Bitubond 200 waterproofing membrane complies with the requirements of ASTM D 6222 type II, Grade S, UEAtc MOAT 30, DIN 52133 International Standards.

### Certificates

The Manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 E M and ISO 45001 OH & S.

## USES

To avoid damp and water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming Pools
- Fountains
- Drain Gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade Structures
- Car Park Deck Slabs



## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	4 ±0.2	mm	ASTM D-5147
Length	10	Meter	ASTM D-5147
Width	1	Meter	ASTM D-5147
Mass/unit area	4.2 ±0.2	Kg/m <sup>2</sup>	ASTM D-5147
Softening Point (Ring & Ball)	>155	°C	ASTM D-36
Penetration	12 to 25	dmm	ASTM D-5
Bottom Side Coating Thickness	> 1	mm	ASTM D-5147
Tensilestrength (L&T) @23±2°C	850/650	N/5cm	DIN 52123 UEAtc M.O.A.T. 30 ASTM D 5147
Elongation (L&T) @23±2°C	40/40	%	ASTM D-5147 UEAtc M.O.A.T. 30
Tear resistance (L&T) @23±2°C	550/450	N	ASTM D-4073 ASTM D-5147
Lap joint strength (L&T)	850/650	N/5cm	UEAtc M.O.A.T. 30 &27
Load strain product: (L&T)	34000 26000		CGSB-37 GP 56M
Puncture Resistance	700	N	ASTM E 154
Puncture Resistance	Static : L4 Dynamic : I4		UEAtc M.O.A.T. 27
Hydrostatic pressure @ 5-bar (72.5 psi)	No Leakage		ASTM D-5147
Resistance to Aging after 2000 hours (Accelerated Weathering Tester)	No deterioration		ASTM D 4799
Heat Resistance for 2-hours	No Flow @ 125°C	°C	ASTM D-5147 UEAtc M.O.A.T. 30
Cold Flexibility	0 to -5 °C	°C	ASTM D-5147
Dimension Stability(L&T)	± 0.5	%	ASTM D-5147
Water absorption	<3.2	%	ASTM D-5147
Moisture content	< 1	%	ASTM D-5147
Appearance	No defects, holes, tears, cracks, blisters		

The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# BITUBOND - 200

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with non-woven polyester mat

## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth, clean and dry. To make sure it is cleaned from nails, grease, dust, debris, oil, protruding elements etc.

### PRIMING

Apply one coat of primer and we recommend using Bituprimer. Allow the primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must be re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position. Each roll must side overlap at least 10 cm, while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15 cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Marking Aids
- Measuring Tape
- Fire Extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other's.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

International Insulation Company (IIC) - Bitugulf technical support team consist of expert engineers offers a comprehensive service support to specifiers, end users and contractors, and on-site technical assistance.

### NOTE

Various thicknesses are available upon request 3,5,6 mm.

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**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%

# BITUROOF - 180

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with non-woven polyester mat

## DESCRIPTION

Bituroof 180 membrane is designed with a superior grade of select bitumen, APP polymers, additives and spun bonded non-woven polyester reinforcement, exhibiting a high performance of waterproofing characteristics meeting the diversified demand of waterproofing application in construction industry.

Bituroof 180 membrane forms an impervious waterproof blanket and withstands normal structural movement.

## ADVANTAGES

- High tensile strength and elongation to withstand dynamic movement in structure.
- High impact strength, tear and puncture resistance.
- Flexibility at low temperatures.
- Stability at high temperatures.
- Resistance towards salts and water-borne chemicals.
- Outstanding bonding ability and seam integrity, fast, easy and clean application.



## SPECIFICATION

Bituroof 180 waterproofing membrane complies with the requirements of ASTM D 6222 type II, Grade S and UEAtc MOAT 30, DIN 52133, International standards.

### Certificates

The Manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 EM and ISO 45001 OH & S

## THICKNESS

Membrane available in different thicknesses (3, 5, 6 mm)

## Technical Data

PROPERTIES	TYPICAL RESULTS	TEST METHOD
Appearance	Nodefects, holes, tears, cracks or blisters	ASTM D-5147
Roll Size, m	10 x 1	ASTM D-5147
Thickness, mm	4 ± 0.2	ASTM D-5147
Mass per unit area min. (g/ m <sup>2</sup> )	3905	ASTM D-5147
Bottom side coating thickness min. mm	1.0	ASTM D-5147
Tensile Strength, N/5cm (L/T) at 23 ± 2 °C	850/650	ASTM D-5147 UEAtc M.O.A.T. 30
Lap Joint Strength, N/5cm (L/T)	850/650	UEAtc M.O.A.T. 30&27
Peak load at at 23 ± 2 °C (L/T) before and after heat conditioning, KN/m minimum	14	ASTM D-5147
Elongation at at 23 ± 2 °C (L/T) before and after heat conditioning, at peak load,% minimum	40	ASTM D-5147
Peak load at -18±2 °C (L/T), KN/m, minimum	15.8	ASTM D-5147
Elongation at -18±2°C (L/T), at peak load, % minimum	15	ASTM D-5147
Elongation at 5% of maximum load at 23±2°C (L/T), % minimum	50	ASTM D-5147
Tear strength at 23±2°C N , minimum	356	ASTM D-5147
Low temperature flexibility, before and after heat conditioning in °C	0 to -5	ASTM D-5147
Dimensional stability % change , maximum	1	ASTM D-5147
Compound stability, in °C minimum	110	ASTM D-5147
Water absorption, % maximum	3.2	ASTM D-5147
Moisture content, % maximum	1	ASTM D-5147
Low temperature unrolling, in °C maximum	5	ASTM D-5147

## USES

To avoid damp and water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming Pools
- Fountains
- Drain Gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade structures
- Car Park Deck Slabs

# BITUROOF - 180

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with non-woven polyester mat

**BITUGULF**  
WATERPROOFING

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International Insulation Company

## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth, clean and dry. To make sure it is cleaned from nails, grease, dust, debris, oil, protruding elements etc.

### PRIMING

Apply one coat of primer and we recommend using Bituprimer. Allow the primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must be re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position. Each roll must side overlap at least 10 cm, while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15 cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Marking Aids
- Measuring Tape
- Fire Extinguisher

# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other's.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

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Clearing the substrate



Application of primer



Prepare the torch & cylinder



Unrolling the membrane



Apply torch on membrane

**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%



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# BITUROOF - 200

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with non-woven polyester mat

## DESCRIPTION

Bituroof 200 membrane is designed with a superior grade of select bitumen, APP polymers, additives and spun bonded non-woven polyester reinforcement, exhibiting a high performance of waterproofing characteristics meeting the diversified demand of waterproofing application in construction industry.

Bituroof 200 membrane forms an impervious waterproof blanket and withstands normal structural movement.

## ADVANTAGES

- High tensile strength and elongation to withstand dynamic movement in structure.
- High impact strength, tear and puncture resistance.
- Flexibility at low temperatures.
- Stability at high temperatures.
- Resistance towards salts and water-borne chemicals.
- Outstanding bonding ability and seam integrity, fast, easy and clean application.



## SPECIFICATION

Bituroof 200 waterproofing membrane complies with the requirements of ASTM D 6222 type II, Grade S and UEAtc MOAT 30, DIN 52133, International standards.

### Certificates

The Manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 EM and ISO 45001 OH & S

## THICKNESS

Membrane available in different thicknesses (3, 5, 6 mm)

## Technical Data

PROPERTIES	TYPICAL RESULTS	TEST METHOD
Appearance	Nodefects, holes, tears, cracks or blisters	ASTM D-5147
Roll Size, m	10 x 1	ASTM D-5147
Thickness, mm	4 ± 0.2	ASTM D-5147
Mass per unit area min. (g/ m <sup>2</sup> )	4505	ASTM D-5147
Bottom side coating thickness min. mm	1.0	ASTM D-5147
Tensile Strength, N/5cm (L/T) at 23 ± 2 °C	850/650	ASTM D-5147 UEAtc M.O.A.T. 30
Lap Joint Strength, N/5cm (L/T)	850/650	UEAtc M.O.A.T. 30&27
Peak load at 23 ± 2 °C (L/T) before and after heat conditioning, KN/m minimum	14	ASTM D-5147
Elongation at 23 ± 2 °C (L/T) before and after heat conditioning, at peak load, % minimum	40	ASTM D-5147
Peak load at -18 ± 2 °C (L/T), KN/m, minimum	15.8	ASTM D-5147
Elongation at -18 ± 2 °C (L/T), at peak load, % minimum	15	ASTM D-5147
Elongation at 5% of maximum load at 23 ± 2 °C (L/T), % minimum	50	ASTM D-5147
Tear strength at 23 ± 2 °C N, minimum	356	ASTM D-5147
Low temperature flexibility, before and after heat conditioning in °C	0 to -5	ASTM D-5147
Dimensional stability % change, maximum	1	ASTM D-5147
Compound stability, in °C minimum	120	ASTM D-5147
Water absorption, % maximum	3.2	ASTM D-5147
Moisture content, % maximum	< 1	ASTM D-5147
Low temperature unrolling, in °C maximum	5	ASTM D-5147

## USES

To avoid damp and water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming Pools
- Fountains
- Drain Gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade structures
- Car Park Deck Slabs

# BITUROOF - 200

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with non-woven polyester mat

**BITUGULF**  
WATERPROOFING

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International Insulation Company

## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth, clean and dry. To make sure it is cleaned from nails, grease, dust, debris, oil, protruding elements etc.

### PRIMING

Apply one coat of primer and we recommend using Bituprimer. Allow the primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must be re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position. Each roll must side overlap at least 10 cm, while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15 cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Marking Aids
- Measuring Tape
- Fire Extinguisher

# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other's.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

International Insulation Company (IIC) - Bitugulf technical support team consist of expert engineers offers a comprehensive service support to specifiers, end users and contractors, and on-site technical assistance.

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Clearing the substrate



Application of primer



Prepare the torch & cylinder



Unrolling the membrane



Apply torch on membrane

**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



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## DESCRIPTION

Biturbo is torch applied membrane manufactured from APP modified distilled bitumen, reinforced with a non-woven spunbonded polyester fabric, rot-proof and flexible. The polyester gives the membrane its excellent mechanical properties, allows for high tensile, elongation and tear strength. The chemical resistance of Biturbo makes it suitable for tanking applications where aggressive ground water conditions dominate.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- Excellent resistance to aging and weathering
- Flexibility at low temperatures
- Stability at high temperatures
- High tensile strength and tear resistance
- Accommodates structural movements
- Fast, easy and clean application

## SPECIFICATION

Biturbo waterproofing membrane complies with the requirements of ASTM D 6222 type II, Grade S, UEAtc MOAT 30, DIN 52133 International Standards.

### Certificates

The Manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 EM and ISO 45001 OH & S

## USES

To avoid damp and water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming Pools
- Fountains
- Drain Gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade structures
- Car Park Deck Slabs



## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	4 ±0.2	mm	ASTM D-5147
Length	10	Meter	ASTM D-5147
Width	1	Meter	ASTM D-5147
Mass/unit area	4.2 ±0.2	Kg/m <sup>2</sup>	ASTM D-5147
Coating Asphalt: Type	APP Modified Asphalt		
Softening Point (Ring & Ball)	>155	°C	ASTM D-36
Penetration	12 to 25	dmm	ASTM D-5
Bottom Side Coating Thickness	> 1	mm	ASTM D-5147
Tensile strength (L&T) @23±2°C	1000/700	N/5cm	DIN 52123 UEAtc M.O.A.T. 30 ASTM D 5147
Peak Load @23±2°C	20/14	KN/m	ASTM D-5147
Elongation (L&T) @23±2°C	45/50	%	ASTM D-5147 UEAtc M.O.A.T. 30
Elongation (L&T) 5 % of maximum load@23±2°C	50/50	%	ASTM D-5147
Tear resistance (L&T) @23±2°C	625/500	N	ASTM D-4073 ASTM D-5147
Lap joint strength (L&T)	1000/700	N/5cm	UEAtc M.O.A.T. 30 & 27
Puncture Resistance	900	N	ASTM E 154
Hydrostatic pressure@ 5-bar (72.5 psi)	No Leakage		ASTM D-5147
Heat Resistance for 2-hours	No Flow @ 125°C	°C	ASTM D-5147 UEAtc M.O.A.T. 30
Cold Flexibility	-2 to -7 °C	°C	ASTM D-5147
Dimension Stability(L&T)	± 0.5	%	ASTM D-5147
Water absorption	<3.2	%	ASTM D-5147
Moisture content	< 0.5	%	ASTM D-5147
Appearance	No defects, holes, tears, cracks, blisters		

## THICKNESS

We produce different thicknesses (3, 4 and 5 mm) are available upon request.

The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# BITURBO

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with non-woven polyester mat

**BITUGULF**  
WATERPROOFING

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International Insulation Company

## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth, clean and dry. To make sure it is cleaned from nails, grease, dust, debris, oil, protruding elements etc.

### PRIMING

Apply one coat of primer and we recommend using Bituprimer. Allow the primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must be re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position. Each roll must side overlap at least 10 cm, while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15 cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Marking Aids
- Measuring Tape
- Fire Extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

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Clearing the substrate



Application of primer



Prepare the torch & cylinder



Unrolling the membrane



Apply torch on membrane

**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



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# SOOR Al Kuwait

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with non-woven polyester mat

## DESCRIPTION

SOOR Al Kuwait is torch applied membrane manufactured from APP modified distilled bitumen, reinforced with a non-woven spunbonded polyester fabric, rot-proof and flexible. The polyester gives the membrane its excellent mechanical properties, allows for high tensile, elongation and tear strength. The chemical resistance of SOOR Al Kuwait makes it suitable for tanking applications where aggressive ground water conditions dominate.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- Excellent resistance to aging and weathering
- Flexibility at low temperatures
- Stability at high temperatures
- High tensile strength and tear resistance
- Accommodates structural movements
- Fast, easy and clean application

## SPECIFICATION

SOOR Al Kuwait waterproofing membrane complies with the requirements of ASTM D 6222 type II, Grade S, UEAtc MOAT 30, DIN 52133 International Standards.

### Certificates

The Manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 EM and ISO 45001 OH & S.

## USES

To avoid damp and water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming Pools
- Fountains
- Drain Gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade structures
- Car Park Deck Slabs



## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	4 ±0.2	mm	ASTM D-5147
Length	10	Meter	ASTM D-5147
Width	1	Meter	ASTM D-5147
Mass/unit area	4.2 ±0.2	Kg/m <sup>2</sup>	ASTM D-5147
Coating Asphalt: Type	APP Modified Asphalt		
Softening Point (Ring & Ball)	>155	°C	ASTM D-36
Penetration	12 to 25	dmm	ASTM D-5
Bottom Side Coating Thickness	> 1	mm	ASTM D-5147
Tensile strength (L&T) @23±2°C	1000/700	N/5cm	DIN 52123 UEAtc M.O.A.T. 30 ASTM D 5147
Peak Load @23±2°C	20/14	KN/m	ASTM D-5147
Elongation (L&T) @23±2°C	45/50	%	ASTM D-5147 UEAtc M.O.A.T. 30
Elongation (L&T) 5 % of maximum load@23±2°C	50/50	%	ASTM D-5147
Tear resistance (L&T) @23±2°C	625/500	N	ASTM D-4073 ASTM D-5147
Lap joint strength (L&T)	1000/700	N/5cm	UEAtc M.O.A.T. 30 & 27
Puncture Resistance	900	N	ASTM E 154
Hydrostatic pressure@ 5-bar (72.5 psi)	No Leakage		ASTM D-5147
Heat Resistance for 2-hours	No Flow @ 120°C	°C	ASTM D-5147 UEAtc M.O.A.T. 30
Cold Flexibility	0 to -5 °C	°C	ASTM D-5147
Dimension Stability(L&T)	± 0.5	%	ASTM D-5147
Water absorption	<3.2	%	ASTM D-5147
Moisture content	< 0.5	%	ASTM D-5147
Appearance	No defects, holes, tears, cracks, blisters		

## THICKNESS

We produce different thicknesses (3, 4 and 5 mm) are available upon request.

The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# SOOR Al Kuwait

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with non-woven polyester mat

## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth, clean and dry. To make sure it is cleaned from nails, grease, dust, debris, oil, protruding elements etc.

### PRIMING

Apply one coat of primer and we recommend using Bituprimer. Allow the primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must be re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position. Each roll must side overlap at least 10 cm, while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15 cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Marking Aids
- Measuring Tape
- Fire Extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

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# OXIDIZED

Torch applied APP modified bitumen waterproofing membrane reinforced with a core of non-woven polyester fabric, rot-proof and flexible

## DESCRIPTION

Oxidized is torch applied membrane manufactured from APP modified bitumen, reinforced with a core of non-woven spun bonded polyester fabric, rot-proof and flexible.

The polyester gives the membrane its excellent mechanical properties, allows for high tensile, elongation and tear strength.

The chemical resistance Oxidized makes it suitable for tanking applications where aggressive ground water conditions dominate.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- Good resistance to aging and weathering
- Stability at high temperatures
- High tensile strength and tear resistance
- Accommodates structural movements
- Fast, easy and clean application



## USES

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming Pools
- Fountains
- Drain Gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade structures
- Car Park Deck Slabs

## THICKNESS

We produce different thicknesses (3,5,6 mm) are available upon request.

## Technical Data

PROPERTIES	TYPICAL RESULTS	TEST METHOD
Appearance	No defects, holes, tears, cracks, blisters	ASTM D 5147
Thickness	>3.7 mm	ASTM D 5147
Width	1 meter	ASTM D 5147
Bottom Side Coating Thickness	>0.8 mm	ASTM D 5147
Net mass per unit area	3700 g/m <sup>2</sup>	ASTM D 5147
Peak load at 23 ±2°C	10 KN/m	ASTM D 5147
Elongation at 23 ±2°C	35%	ASTM D 5147
Tear strength at 23 ±2°C	>70 N	ASTM D 4073
Dimensional stability	0.5%	ASTM D 5147
Hightemperature stability	120°C	ASTM D 5147
Water absorption	<3.2%	ASTM D 5147
Moisture content	0.5%	ASTM D 5147

## SPECIFICATION

Oxidized waterproofing membrane complies with the requirements of ASTM D 6222 type I, Grade S, UEAtc MOAT 30, DIN 52133 International Standards.

Approvals / Certificates

Product Manufactured in Kuwait.

Manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 Environmental Management and ISO 45001 Occupational Health and Safety Management System.

The information given in this data sheets is the average of test of various samples conducted under lab conditions.  
\*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# OXIDIZED

Torch applied APP modified bitumen waterproofing membrane reinforced with a core of non-woven polyester fabric, rot-proof and flexible

**BITUGULF**  
WATERPROOFING

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International Insulation Company

## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth, clean and dry. To make sure it is cleaned from nails, grease, dust, debris, oil, protruding elements etc.

### PRIMING

Apply one coat of primer and we recommend using Bituprimer. Allow the primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must be re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position. Each roll must side overlap at least 10 cm, while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15 cm overlap.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available at site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### TECHNICAL SUPPORT

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**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



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# ULTRAFLAME

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with Heavy duty non-woven polyester mat

## DESCRIPTION

Ultraflame is torch applied membrane manufactured from APP modified distilled bitumen, reinforced with a core of heavy duty non-woven spunbonded polyester fabric, rot- proof and flexible. The polyester gives the membrane its excellent mechanical properties, allows for high tensile, elongation and tear strength. The chemical resistance of Ultraflame makes it suitable for tanking applications where aggressive ground water conditions dominate.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- Excellent resistance to aging and weathering
- Flexibility at low temperatures
- Stability at high temperatures
- High tensile strength and tear resistance
- Accommodates structural movements
- Fast, easy and clean application

## SPECIFICATION

Ultraflame waterproofing membrane complies with the requirements of ASTM D 6222 type II, Grade S and UEAtc MOAT 30, DIN 52133 International Standards.

### Certificates

The manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 EW and ISO 45001 OH & S

## USES

To avoid damp and water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Bridges
- Drain Gutters
- Tunnels
- Sub-grade structures
- Car Park Deck Slabs
- Foundations
- Swimming Pools
- Fountains
- Bathrooms
- Reservoirs



## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Appearance	No defects, holes, tears, cracks or blisters		
Roll Size	10 x 1	m	ASTM D-5147
Thickness	4 ± 0.2	mm	ASTM D-5147
Mass per unit area min.	3905	g/m <sup>2</sup>	ASTM D-5147
Bottom side coating thickness min.	1.0	mm	ASTM D-5147
Tensile Strength (L/T) at 23 ± 2 °C	1025/800	N/5cm	ASTM D 5147 UEAtc M.O.A.T. 30
Lap Joint Strength (L/T)	1025/800	N/5cm	UEAtc M.O.A.T. 30 & 27
Peak load at 23 ± 2 °C (L/T)(before and after heat conditioning), minimum	14	KN/m	ASTM D-5147
Elongation at 23 ± 2 °C (L/T) (before and after heat conditioning), at peak load, Minimum	40	%	ASTM D-5147
Peakload at -18 ± 2 °C (L/T), minimum	15.8	KN/m	ASTM D-5147
Elongation at -18 ± 2 °C (L/T), at peak load, % minimum	15	%	ASTM D-5147
Elongation at 5% of maximum load at 23 ± 2 °C (L/T), % minimum	50	%	ASTM D-5147
Tear strength at 23 ± 2 °C, minimum	356	N	ASTM D-5147
Low temperature flexibility, (before and after heat conditioning)	0 to -7	°C	ASTM D-5147
Dimensional stability % change, maximum	1	%	ASTM D-5147
Compound stability, in °C minimum	110	°C	ASTM D-5147
Water absorption, maximum	3.2	%	ASTM D-5147
Moisture content, maximum	1	%	ASTM D-5147
Low temperature unrolling, in maximum	5	°C	ASTM D-5147

## THICKNESS

Membrane available in different thicknesses (3, 5, 6 mm)

The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# ULTRAFLAME

Torch applied APP modified bitumen waterproofing membrane 4mm thick reinforced with Heavy duty non-woven polyester mat

**BITUGULF**  
WATERPROOFING

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International Insulation Company

## INSTRUCTION TO USE

### SURFACE CLEANING

All surfaces should be smooth, clean and dry. To make sure it is cleaned from nails, grease, dust, debris, oil, protruding elements etc.

### PRIMING

Apply one coat of primer and we recommend using Bituprimer, Seal Coat D41 or Aquaproof. Allow the primer coat to dry until it is tack free. Prior to the application of the membrane, all surfaces must be re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position. Each roll must side overlap at least 10 cm, while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15 cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Marking Aids
- Measuring Tape
- Fire Extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

International Insulation Company (IIC) - Bitugulf technical support team consist of expert engineers offers a comprehensive service support to specifiers, end users and contractors, and on-site technical assistance.

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**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



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# BITUFLEX - 1600

Torch applied SBS modified bitumen waterproofing membrane 4mm thick, reinforced with 160 gsm non-woven polyester mat

## DESCRIPTION

Bituflex-1600 is torch applied membrane manufactured from SBS modified distilled bitumen, reinforced with core of non-woven polyester fabric, rot-proof and flexible. The polyester gives the membrane its excellent mechanical properties, allows for high tensile, elongation and tear strength. The chemical resistance of Bituflex-1600 makes it suitable for tanking applications where aggressive ground water conditions dominate.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- Excellent resistance to aging and weathering
- Flexibility at low temperature
- Stability at high temperature
- High tensile strength and tear resistance
- Accommodates structural movement
- Fast, easy and clean application

## SPECIFICATION

Bituflex 2000 waterproofing membrane complies with the requirements of ASTM D 6164 Type I, Grade S.

### Certificates

The manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 E M and ISO 45001 O H & S.



## USES

To avoid damp and water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming Pools
- Fountains
- Drain Gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade Structures
- Car Park Deck Slabs

## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	4 ± 0.2	mm	ASTM D-5147
Length	10	m	ASTM D-5147
Width	1	m	ASTM D-5147
Mass/unit area	4.2 ± 0.2	Kg/m <sup>2</sup>	ASTM D-5147
Coating Asphalt : Type	SBS Modified		
Softening Point (Ring & Ball)	>120	°C	ASTM D-36
Penetration	15 to 30	dmm	ASTM D-5
Tensile strength (L&T) @23°C±2	>700/550	N/5cm	DIN 52123 UEAtc M.O.A.T.30
Elongation (L&T) @23°C±2	45/45	%	DIN 52123 UEAtc M.O.A.T.30
Tear resistance (L&T) @23°C±2	450/350	N	ASTM D-4073 ASTM D-5147
Overlap joint test (L&T) @23°C±2	700/550	N/5cm	DIN 52123 UEAtc M.O.A.T.30 &27
Puncture Resistance	>600	N	ASTM E 154
Hydrostatic pressure @ 5-bar	No Leakage		ASTM D-5147
Heat Resistance for 2-hours	No Flow @ 100	°C	ASTM D-5147
Cold Flexibility	-12 to -15	°C	ASTM D-5147
Dimension Stability(L&T)	± 0.5	%	ASTM D-5147
Water Absorption	<0.12	%	ASTM D-5147

## STORAGE

Keep the products packed in a dry place. Away from direct sunlight. Do not place the pallets one on top of another and the rolls must always be stacked in a vertical position.

## THICKNESS

Different thicknesses (3,5,6 mm) are available upon request.

# BITUFLEX - 1600

Torch applied SBS modified bitumen waterproofing membrane 4mm thick, reinforced with 160 gsm non-woven polyester mat

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WATERPROOFING

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International Insulation Company

## INSTRUCTION TO USE

### PRIMING

Apply liberal coat of the recommended primer and we recommended to use Bituprimer allowed primer coat to dry until it is tack free. Prior to the application of the membrane. All surfaces must re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position where it is to be torched on later. Each roll must side overlap at least 10cm while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Protective gloves and goggles
- Marking aids
- Measuring tape
- Fire extinguisher

### SURFACE PREPARATION

All surfaces should be smooth and free from all harmful objects and thoroughly cleaned, from (nails, grease, dust, debris, oil, protruding elements etc.)



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

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# BITUFLEX - 1800

Torch applied SBS modified bitumen waterproofing membrane 4mm thick, reinforced with non-woven polyester mat.

## DESCRIPTION

Bitulfex-1800 is torch applied membrane manufactured from SBS modified distilled bitumen, reinforced with a core of non-woven polyester fabric, rot-proof and flexible. The polyester gives the membrane its excellent mechanical properties, allows for high tensile, elongation, and tear strength. The chemical resistance of Bitulfex-1800 makes it suitable for tanking applications where aggressive ground water conditions dominate.

## ADVANTAGES

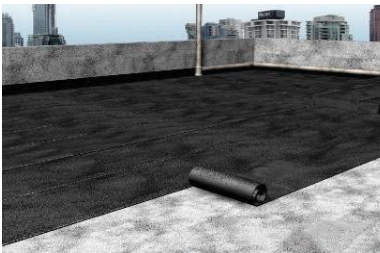
- Positive barrier to water ingress and dampness
- Excellent resistance to aging and weathering
- Flexibility at low temperature
- Stability at high temperature
- High tensile strength and tear resistance
- Accommodates structural movements
- Fast, easy and clean application

## SPECIFICATION

Bitulfex 1800 waterproofing membrane complies with the requirements of ASTM D 6164 Type II, Grade S.

### Certificates

Manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 EM and ISO 45001 OH & S.



## USES

To avoid damp and water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming Pools
- Fountains
- Drain gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub-grade Structures
- Car Park Deck Slabs

## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	4 ± 0.2	mm	ASTM D-5147
Length	10	m	ASTM D-5147
Width	1	m	ASTM D-5147
Mass/unit area	4.2 ± 0.2	Kg / m <sup>2</sup>	ASTM D-5147
Coating Asphalt : Type	SBS Modified Bitumen		
Softening Point (Ring & Ball)	>120	°C	ASTM D-36
Penetration	20 to 30	dmm	ASTM D-5
Tensile strength (L&T) @23°C ±2	>800/650	N/5c m	DIN 52123 UEAtc M.O.A.T.30
Elongation (L&T) @23±2	45/50	%	DIN 52123 UEAtc M.O.A.T.30
Tear Resistance (L&T) @ 23°C ±2	500/400	N	ASTM D-4073 ASTM D-5147
Overlap Joint Test (L&T) @ 23 °C ±2	800/650	N/5c m	DIN 52123 UEAtc M.O.A.T.30 &27
Puncture Resistance	>750	N	ASTM E 154
Hydrostatic pressure @ 5-bar	No Leakage		ASTM D-5147
Heat Resistance for 2-hours	No Flow @ 105	°C	ASTM D-5147
Cold Flexibility	-12 to -20	°C	ASTM D-5147
Dimension Stability(L&T)	± 0.5	%	ASTM D-5147
Water Absorption	<0.14	%	ASTM D-5147

## THICKNESS

We produce different thicknesses (3, 5, 6 mm) are available upon request.

The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# BITUFLEX - 1800

Torch applied SBS modified bitumen waterproofing membrane 4mm thick, reinforced with non-woven polyester mat.

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WATERPROOFING

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## INSTRUCTION TO USE

### SURFACE PREPARATION

All surfaces should be smooth and free from all harmful objects and thoroughly cleaned, from (nails, grease, dust, debris, oil, protruding elements etc.)

### PRIMING

Apply liberal coat of the recommended primer and we recommend to use Bituprimer or Seal Coat D41, allow the primer coat to dry until it is tack free. Prior to the application of the membrane. All surfaces must re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position where it is to be torched on later. Each roll must side overlap at least 10cm while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/cutter
- Trowel with a rounded tip
- Protective gloves and goggles
- Marking aids
- Measuring tape
- Fire extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

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# BITUFLEX - 2000

Torch applied SBS modified bitumen waterproofing membrane 4mm thick, reinforced with non-woven polyester mat

## DESCRIPTION

Bituflex-2000 is torch applied membrane manufactured from SBS modified distilled bitumen, reinforced with a core of non-woven polyester fabric, rot-proof and flexible.

The polyester gives the membrane its excellent mechanical properties, allows for high tensile, Elongation, and tear strength.

The chemical resistance of Bituflex-2000 makes its suitable for tanking applications where aggressive ground water conditions dominate.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- Excellent resistance to aging & weathering
- Flexibility at low temperature
- Stability at high temperature
- High tensile strength & tear resistance
- Accommodates structural movements
- Fast, easy and clean application

## SPECIFICATION

Bituflex 2000 waterproofing membrane complies with the requirements of ASTM D 6164 Type II, Grade 5.

### Certificates

Manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 EM and ISO 45001 OH & S.



## USES

To avoid damp & water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming pools
- Fountains
- Drain gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub grade structures

## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	3,4 ± 0.2	mm	ASTM D-5147
Length	10	m	ASTM D-5147
Width	1	m	ASTM D-5147
Mass/unit area	4.2 ± 0.2	Kg/m <sup>2</sup>	ASTM D-5147
Softening Point (Ring & Ball)	>110	°C	ASTM D-36
Penetration	20 to 35	dmm	ASTM D-5
Tensile strength (L&T) @ 23°C ±2	>900/800	N/5cm	DIN 52123 UEAtc M.O.A.T.30
Elongation (L&T) @ 23°C±2	45/50	%	DIN 52123 UEAtc M.O.A.T.30
Tearresistance (L&T) @23°C±2	600/500	N	ASTM D-4073 ASTM D-5147
Overlap joint test (L&T) @23°C±2	900/800	N/5cm	DIN 52123 UEAtc M.O.A.T.30 &27
Load Strain Product (L/T)	40500/40000		CGSB-37 GP 56 M
Puncture Resistance	>900	N	ASTM E 154
Puncture Resistance	Static: L3 Dynamic : I3		UEAtc M.O.A.T.30 &27
Hydrostatic pressure @ 5-bar	No Leakage		ASTM D-5147
Resistance to Water pressure 2 bar (29 psi)	No Leakage		DIN 52123
Heat Resistance for 2-hours	No Flow @ 100	°C	ASTM D-5147
Cold Flexibility	>-18	°C	ASTM D-5147
Dimension Stability(L&T)	± 0.5	%	ASTM D-5147
Water Absorption	<0.15	%	ASTM D-5147

## THICKNESS

Different thicknesses (3,5,6 mm) are available upon request.

The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# BITUFLEX - 2000

Torch applied SBS modified bitumen waterproofing membrane 4mm thick, reinforced with non-woven polyester mat

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WATERPROOFING

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## INSTRUCTION TO USE

### SURFACE PREPARATION

All surfaces should be smooth and free from all harmful objects and thoroughly cleaned, from (nails, grease, dust, debris, oil, protruding elements etc.)

### PRIMING

Apply liberal coat of the recommended primer and we recommend using Bituprimer allowed primer coat to dry until it is tack free. Prior to the application of the membrane. All surfaces must re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position where it is to be torched on later. Each roll must side overlap at least 10-cm while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15-cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/ cutter
- Trowel with a round tip
- Protective gloves and goggles
- Marking aids
- Measuring tape
- Fire extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available at site. Care should be taken with gas, and torch should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

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# BITUFLEX - 2500

Torch applied SBS modified bitumen waterproofing membrane 4mm thick, reinforced with 250 gsm non-woven polyester mat

## DESCRIPTION

Bituflex-2500 is torch applied membrane manufactured from SBS modified distilled bitumen, reinforced with a core of non-woven polyester fabric, weighing 250-gsm, rot-proof and flexible.

The polyester gives the membrane its excellent mechanical properties, allows for high tensile, Elongation, and tear strength.

The chemical resistance of Bituflex-2500 makes it suitable for tanking applications where aggressive ground water conditions dominate.

## ADVANTAGES

- Positive barrier to water ingress and dampness
- Excellent resistance to aging & weathering
- Flexibility at low temperature
- Stability at high temperature
- High tensile strength & tear resistance
- Accommodates structural movements
- Fast, easy and clean application

## SPECIFICATION

The waterproofing membrane shall be a high-performance torch applied 4mm thick SBS membrane, manufactured from high quality polymer. Modified bituminous compounds and reinforced with non-woven polyester waterproofing membrane. Complies with the requirements of ASTM D 6164. Type II, Grade S.



## USES

To avoid damp & water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming pools
- Fountains
- Drain gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub grade structures

## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	3,4 ± 0.2	mm	ASTM D-5147
Length	10	Mt.	ASTM D-5147
Width	1	Mt.	ASTM D-5147
Mass/unit area	4.2 ± 0.2	Kg/mt <sup>2</sup>	ASTM D-5147
Polyester	250	g/ mt <sup>2</sup>	UEAtc M.O.A.T.30
Glass fiber		g/ mt <sup>2</sup>	
Coating Asphalt : Type	SBS Modified		
Softening Point (Ring & Ball)	>120	°C	ASTM D-36
Penetration	20 to 35	dmm	ASTM D-5
Tensile strength (L&T) @23°C±2	>900/800	N/5cm	DIN 52123 UEAtc M.O.A.T.30
Elongation (L&T) @23°C±2	45/50	%	DIN 52123 UEAtc M.O.A.T.30
Tear resistance (L&T) @23°C±2	600/500	N	ASTM D-4073 ASTM D-5147
Overlap joint test (L&T) @23°C±2	900/800	N/5cm	DIN 52123 UEAtc M.O.A.T.30 &27
Load Strain Product (L/T)	40500/40000		CGSB-37 GP 56 M
Puncture Resistance	>900	N	ASTM E 154
Puncture Resistance	Static: L3 (Not punched at 15 kg load) Dynamic : I3 (Not perforated at 8-12 mm indenter)		UEAtc M.O.A.T.30 &27
Hydrostatic pressure @5-bar	No Leakage		ASTM D-5147
Resistance to Water pressure 2 bar (29 psi)	No Leakage		DIN 52123
Heat Resistance for 2-hours	No Flow @ 100	°C	ASTM D-5147
Heat Resistance @90 °C	No Flowing		DIN 52123
Cold Flexibility	-20	°C	ASTM D-5147
Cold Flexibility @ - 5 °C	No Cracking		DIN 52123
Dimension Stability(L&T)	± 0.5	%	ASTM D-5147
Water absorption	<0.15	%	ASTM D-5147

## THICKNESS

We produce different thicknesses (3,5,6 mm) are available upon request.

The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# BITUFLEX - 2500

Torch applied SBS modified bitumen waterproofing membrane 4mm thick, reinforced with 250 gsm non-woven polyester mat

**BITUGULF**  
WATERPROOFING

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International Insulation Company

## INSTRUCTION TO USE

### SURFACE PREPARATION

All surfaces should be smooth and free from all harmful objects and thoroughly cleaned, from (nails, grease, dust, debris, oil, protruding elements etc.)

### APPLICATION

The membrane is unrolled and placed in the correct position where it is to be torched on later. Each roll must side overlap at least 10-cm while slowly unrolling the membrane the surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15-cm overlap.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/ cutter
- Trowel with a round tip
- Protective gloves and goggles
- Marking aids
- Measuring tape
- Fire extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

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Clearing the substrate



Application of primer



Prepare the torch & cylinder



Unrolling the membrane



Apply torch on membrane

**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



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# BITUFLEX - SL

Torch applied SBS modified bitumen waterproofing membrane 4mm thick, reinforced with 60 GSM glass-Fiber

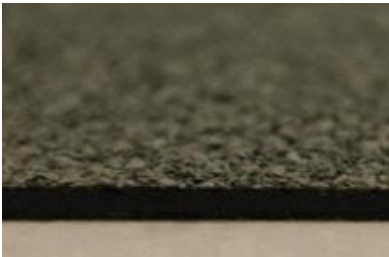
## DESCRIPTION

Bituflex-SL is rot-proof high performance waterproofing membrane, produced with a layer of natural slate flakes on weathering side to protect the membrane from UV radiation and ageing.

Produced in a highly controlled process, the reinforcement made of nominal 200 gm/m<sup>2</sup> non-woven polyester reinforced with glass- fiber threads. And straight run bitumen modified with selected SBS polymers and stabilizers.

## STANDARDS

Complies with the requirements of ASTM D 6164 type II grade G



## FEATURES

- Positive barrier to water and dampness
- Excellent resistance to ageing and atmospheric agents
- Accommodates structural movements
- Designed for use and exposed system
- Provided with lap strip
- Resistant to water-born chemical attack
- Stability at high temperatures
- Excellent puncture and tear resistance
- Excellent resistance to UV rays, aging and weathering
- Easy for application and repair works

## USES

Bituflex-SL is ideal to use for new and re- roofing applications. It can be used in almost every waterproofing application which includes roofs, balconies, basements, reservoirs, bridges, tunnels, lining for sewage canals, sub-grade structures etc.

## Technical Data

PROPERTIES	RESULTS	TEST METHOD
Appearance	Nodefects, holes, tears, cracks or blisters	ASTM D 5147
Roll Size	1 x 10 (meter)	ASTM D 5147
Thickness	>4.0 (mm)	ASTM D 5147
Mass per unit area	>4400 (g/m <sup>2</sup> )	ASTM D 5147
Tensile Strength	650/500	DIN 52123 UEAtc M.O.A.T.30
Elongation L/T @23 ± 2°C	45/45 %	ASTM D 5147
Tear Strength L/T @23 ± 2°C	500/450 N/5cm	ASTM D 5147
Puncture Resistance	700 N	ASTM D 5147
Dimension stability	+ 0.5 (%)	ASTM D 5147
High temperature stability 100 + 2°C: 2hrs	No flow at 110 °C	ASTM D 5147
Low temperature flexibility	0 to - 5 °C	ASTM D 5636
Water absorption	<0.15 (%)	ASTM D 5147

## THICKNESS

We produce different thicknesses (3,5,6 mm) are available upon request.

The information given in this data sheets is the average of test of various samples conducted under lab conditions.  
\*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# BITUFLEX - SL

Torch applied SBS modified bitumen waterproofing membrane 4mm thick, reinforced with 60 GSM glass-Fiber

**BITUGULF**  
WATERPROOFING

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International Insulation Company

## INSTRUCTION TO USE

### SURFACE PREPARATION

The surface must be thoroughly cleaned and should be free from dust, debris, oil and protruding elements.

### PRIMING

Apply liberal coat of the recommended primer and we recommend using Sealcoat D41. Allow primer coat to dry until it is tack free prior to application of the membrane. All surfaces must re-primed if left more than 24 hours.



### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife / Cutter
- Trowel with a rounded tip
- Protective gloves and goggles
- Marking aids
- Measuring tape
- Fire extinguisher

### SPECIFICATIONS

#### Loose Laid

Re-roll the unrolled membrane to a length suitable for application without changing the orientation. Melt minimum 15 cm from the edges. Fix the melt portion firmly to the pre-primed surface. Position the subsequent rolls, give edge overlapping of minimum 15 cm, side overlapping of minimum 15 cm and continue until the area is fully fixed. The melted compound should be spread with a trowel or roller to ensure a smooth tight seal.

#### Fully Bonded

Melt the lower surface of the membrane with a gas torch by moving the flame across the entire width of the roll. Fix the melt portion firmly to the pre-primed surface. The subsequent rolls should be done in the same manner as of loose laid membrane.

# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

International Insulation Company (IIC) - Bitugulf technical support team consist of expert engineers offers a comprehensive service support to specifiers, end users and contractors, and on-site technical assistance.

### INTERNATIONAL INSULATION COMPANY (BITUGULF)

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**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



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CONTRACTORS ASSOCIATION  
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## DESCRIPTION

A high-performance multi-ply prefabricated self-adhering bituminous waterproof sheet membrane consisting of a highly elastic bituminous compound, internally reinforced with fiberglass and topped with a 100 micron, HDPE film. It also incorporates at bottom side with a quick release siliconized film which is removed just prior to the application to the tack coat primed substrate to ensure clean adhesion. Then immediately protect from UV light and mechanical damage during back filling by the application of the protection board.

## USES

The ideal membrane for damp proofing foundation, bridges, viaducts and tunnels, sub-grade and various building and civil works as well as industrial application.



## ADVANTAGES

- 1.5 - 2.2 mm thick, cold applied
- Extremely flexible
- The HDPE Film provides dimensional stability, high tear strength, puncture and impact resistance to the membrane.
- Excellent resistance to aggressive soils and contaminated ground water.
- Ease, fast application
- Good adhesion to primed concrete substrate.

## APPROVALS/ CERTIFICATES

The manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 EM and ISO 45001 OH & S.



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## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	1.5 – 2.2	mm	ASTM D-5147
Length	10, 15 & 20	m	ASTM D-5147
Width	1	m	ASTM D-5147
Mass/unit area	1.55 – 2.25	Kg/m <sup>2</sup>	ASTM D-5147
Reinforcement : Glass Fiber	60	g/m <sup>2</sup>	UEAtc M.O.A.T.30
Coating Asphalt : Type	SBS Modified		
Tensile Strength (L&T) @ 23 °C ± 2 : For Film	150/140	Kg/cm <sup>2</sup>	ASTM D-638
Elongation (L&T) @ 23 °C ± 2 : For Film	220/185	%	ASTM D-638
Puncture Resistance	>260	N	ASTM E 154
Hydrostatic Pressure @5-bar	>4 bar		ASTM D-5147
Cold Flexibility	> -16	°C	ASTM D-5147
Water Absorption	0.14	%	ASTM D-5147
Peel of Strength ,To primed concrete ,To self	1.85 1.85	Mpa Mpa	ASTMD-1000 ASTM D-1000

## PACKING

BITUFIX-G produced in 10-20 meters, special length is available upon request. The rolls are vertical palletized and shrink wrapped. The rolls can also be supplied in carton boxes. The rolls must be transported and kept in stock always in a vertical position.

The information given in this data sheets is the average of test of various samples conducted under lab conditions.  
\*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# BITUFIX - G

Cold applied self adhesive bituminous waterproofing membrane

## INSTRUCTIONS FOR USE

### SURFACE PREPARATION

Concrete should be clean, free of voids, honeycomb coarse aggregates, and any traces of curing compound to be removed. The concrete should be at least 8 days old.

### PRIMING

Coat the surface with Solvent Base Bitumen Primer and allow to dry overnight. All surfaces must be re-primed if left for more than 24 hours prior to the application.



### APPLICATION

Remove the release film by peeling back not more than 30 cm's at a time. Start to unroll the membrane. It should be firmly pressed down using a rubber hand roller to ensure proper sealing, working from the center to the outer edges. This will drive out all trapped air. For subsequent rolls align the adjacent roll along the selvedge of the first roll. Re-roll the membrane. Peel back the release film from the second roll and place firmly. This should be done one meter at a time. The overlap joints should be 5 to 10 cm at the sides and 10 to 15 cm at the end. On vertical or inclined surfaces, the membrane shall be laid from the lowest level upwards. Applicant temperature range 5 - 50 °C. In cases below 15 °C it is necessary to slightly warm the back of

the membrane to have well and ease adhesion to substrate. In cold conditions the membrane should be stored at temperature above 20 °C prior to application.

# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available at site. Care should be taken with gas, and torch should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

Shelf life is 12 months if stores in a cool dry store away from sources of heat. In the original unopened packaging.

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

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Clearing the substrate



Application of primer



Prepare the torch & cylinder



Unrolling the membrane



Apply torch on membrane

**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



NATIONAL ROOFING  
CONTRACTORS ASSOCIATION  
**MEMBER**

### DESCRIPTION

A high-performance multi-ply prefabricated self-adhering bituminous waterproof sheet membrane consisting of a highly elastic bituminous compound, internally reinforced with a non-woven polyester and topped with a 100-micron, cross laminated HDPE film. It also incorporates at bottom side with a quick release siliconized film which is removed just prior to the application to the tack coat primed substrate to ensure clean adhesion.

Then immediately protect from UV light and application and mechanical damage during back filling by the application of protection board.

### USES

The ideal membrane for damp proofing foundations, bridges, viaducts and tunnels, sub- grade and various building and civil works as well as industrial application.

### ADVANTAGES

- 1.6 - 2.2 mm thick, cold applied
- Extremely flexible
- The cross lamination provides dimensional stability, high tear strength, puncture and impact resistance to the membrane
- Excellent resistance to aggressive soils and contaminated ground water
- Ease, fast application
- Good adhesion to primed concrete substrate

### APPROVALS/ CERTIFICATES

The manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 E M and ISO 45001 O H & S.



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CONTRACTORS ASSOCIATION  
**MEMBER**

### Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	1.6 – 2.2	mm	ASTM D-5147
Length	10, 15 & 20	M.	ASTM D-5147
Width	1	M.	ASTM D-5147
Mass/unit area	1.85 – 2.35	Kg/m <sup>2</sup>	ASTM D-5147
Reinforcement : Polyester	120 – 160	g/m <sup>2</sup>	UEAtc M.O.A.T.30
Coating Asphalt : Type	SBS Modified		
Tensile Strength (L&T) @ 23 °C ± 2 : For Film	150/140	kg/cm <sup>2</sup>	ASTM D-638
Elongation (L&T) @ 23 °C ± 2 : For Film	220/185	%	ASTM D-638
Puncture Resistance	>260	N	ASTM E 154
Cold Flexibility	> -18	°C	ASTM D-5147
Water Absorption	0.14	%	ASTM D-5147
Peel of Strength To primed concrete To self	1.9 1.9	Mpa Mpa	ASTMD-1000 ASTM D-1000

### PACKING

BITUFIX-P produced in 10-20 meters, special lengths are available upon request. The rolls are vertical palletized and shrink wrapped. The rolls must be transported and kept in stock always in a vertical position.

### STORAGE

Shelf life is 12 months if stores in a cool dry store away from sources of heat. In the original unopened packaging.

# BITUFIX - P

Heavy duty cross laminated waterproofing membrane

**BITUGULF**  
WATERPROOFING

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International Insulation Company

## INSTRUCTIONS FOR USE

### SURFACE PREPARATION

Concrete should be clean, free of voids, honeycomb coarse aggregates, and any traces of curing compound to be removed. The concrete should be at least 8 days old.

### PRIMING

Coat the surface with Solvent Base Bitumen Primer and allow it to dry overnight. All surfaces must be re-primed if left for more than 24 hours prior to the application.



### APPLICATION

Remove the released film by peeling back not more than 30 cm's at a time. Start to unroll the membrane. It should be firmly pressed down using a rubber hand roller to ensure proper sealing, working from the center to the outer edges. This will drive out all trapped air. For subsequent rolls align the adjacent roll along the selvedge of the first roll. Re-roll the membrane. Peel back the release film from the second roll and place firmly. This should be done one meter at a time. The overlap joints should be 5 to 10 cm at the sides and 10 to 15 cm at the end. On vertical or inclined surfaces, the membrane shall be laid from the lowest level upwards. Applicant temperature range 5 -50°C. In cases below 15°C it is necessary to slightly warm the back of the membrane to have well and ease adhesion to substrate. In cold conditions the membrane should be stored at temperature above 20°C prior to application.

### STORAGE

Shelf life is 12 months if stores in a cool dry store away from sources of heat. In the original unopened packaging.

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### TECHNICAL SUPPORT

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# BITUTWIN

Torch applied SBS modified bitumen waterproofing membrane 4 and 5 mm thick, using a combination of Polyester and Glass Fiber Reinforcement.

## DESCRIPTION

BITUTWIN is a high-performance torch applied membrane manufactured from SBS modified distilled bitumen, reinforced with a combination of spun bond non-woven polyester and glass fiber.

It is designed to have superior properties and functionalities of both polyester and glass fiber reinforcement for a wide range of construction applications. The combination of polyester and glass fiber gives the membrane its excellent mechanical properties, allows for high tensile, elongation and tear strength.



## ADVANTAGES

- Positive barrier to water ingress and dampness
- Excellent resistance to aging & weathering
- Flexibility at low temperature
- Stability at high temperature
- High tensile strength & tear resistance
- Accommodates structural movements
- Fast, easy and clean application
- Higher dimensional stability
- Superior puncture resistance

## SPECIFICATION COMPLIANCE

BITUTWIN membranes comply with ASTM D 6162 Type II Grad S standard specification and can be tested as per ASTM D 5147, UEAtc standards test method or any relevant international standard.

### Certificates

The manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 E M and ISO 45001 OH & S.



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## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Thickness	4 ± 0.2	mm	ASTM D-5147
Length	10	Mt.	ASTM D-5147
Width	1	Mt.	ASTM D-5147
Mass/unit area	4.2 ± 0.2	Kg/m <sup>2</sup>	ASTM D-5147
Softening Point (Ring & Ball)	>115	°C	ASTM D-36
Penetration	12 to 25	dmm	ASTM D-5
Tensile strength (L&T) @23°C±2	900/650	N/5cm	DIN 52123 UEAtc M.O.A.T.30
Elongation (L&T) @23°C±2	50/55	%	DIN 52123 UEAtc M.O.A.T.30
Tear resistance (L&T) @23°C±2	450/400	N	ASTM D-4073 ASTM D-5147
Heat Resistance for 2 hours	No Flow @ 110	°C	ASTM D-5147
Cold Flexibility	> -18	°C	ASTM D-5147
Water Absorption	< 0.2	%	ASTM D-5147

## USES

To avoid damp & water leakage risk, it's recommended for:

- Concrete roof and floor slabs
- Basements
- Foundations
- Swimming pools
- Fountains
- Drain gutters
- Bathrooms
- Reservoirs
- Bridges
- Tunnels
- Sub grade structures
- Car park deck slabs

# BITUTWIN

**Torch applied SBS modified bitumen waterproofing** membrane 4 and 5 mm thick, using a combination of Polyester and Glass Fiber Reinforcement.

**BITUGULF**  
WATERPROOFING

شركة العوازل الدولية  
International Insulation Company

## INSTRUCTIONS FOR USE

### SURFACE PREPARATION

All surfaces should be smooth and free from all harmful objects and thoroughly cleaned, from (nails, grease, dust, debris, oil, protruding elements etc.)

### PRIMING

Apply liberal coat of the recommended primer and we recommend using Sealcoat D41, allow the primer coat to dry until it is tack free prior to the application of the membrane. All surfaces must re-primed if left for more than 24 hours.

### APPLICATION

The membrane is unrolled and placed in the correct position where it is to be torched on later. Each roll must overlap at least 10-cm while slowly unrolling the membrane. The surface is lightly heated by means of a propane gas torch causing surface melting and subsequent adhesion to the surface. End joints should be made with a minimum of 15-cm overlap. It is recommended to protect the membrane from long-term exposure, construction abuse and backfill, within 24 hours. On vertical areas BITUBOARD are recommended: on horizontal surfaces sand cement screed may be used.

### APPLICATION TOOLS AND EQUIPMENT

- Propane gas torch with related gas cylinder
- Knife/ cutter
- Trowel with a round tip
- Protective gloves and goggles
- Marking aids
- Measuring tape
- Fire extinguisher



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

### TECHNICAL SUPPORT

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## DESCRIPTION

Gulfboard is a semi flexible board impregnated with (APP) modified bitumen reinforced with non-woven polyester used for shielding waterproofing membrane against physical damage.

## USES

To protect waterproofing membranes and waterproofing systems on roofs, bridges, basements, foundations, car parks and tunnels, etc, against impact and abrasion damage from site traffic and from sharp materials during backfill operations.

## ADVANTAGES

- Light and easily handled
- Durable
- Robust
- Economical and convenient to use
- Low water absorption
- Flexible at low temperatures
- Stability at high temperatures
- Rot-proof
- Improves the ability of the waterproofing system.

## SPECIFICATIONS

The waterproofing membrane shall be protected from mechanical damage by a protection board. Selection of thickness depends on specification requirement to resist impact load.

### Certificates

The manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 EM and ISO 45001 O H & S.

## PROPERTIES

Nominal size 1 x 2 mtr. Weight 3 to 6 kg/m<sup>2</sup>

## THICKNESS

We produce different thicknesses (3,4,6 mm) are available upon request.

## Technical Data

PROPERTIES	RESULTS	TEST METHOD
Board Thickness (mm)	5.6 - 7.1	ASTM D 5147
Coating Asphalt	APP Modified Asphalt	
Softening point (R&B)	>150 °C	ASTM D 36
Penetration at 25 °C (dmm)	6 - 8	ASTM D 5
Bitumen Content, minimum	50 %	ASTM D 4
Water Absorption at 24 Hrs.	0.25 – 0.35 %	ASTM D 570
Puncture Resistance (N)	800	ASTM E 154
Resistance to Decay	Meets Puncture Requirements	
Deflection (mm)	12 - 13	12 - 13

The information given in this data sheets is the average of test of various samples conducted under lab conditions.  
\*In accordance to ASTM and UAEtc Standards results are subjected to 5 to 20% tolerance.

## INSTRUCTION FOR USE

### APPLICATION

Gulfboard can be spot bonded on to membrane by torch application method and pressed with a hard roller to strengthen the adhesion of the melted bitumen compound with the membrane surface. Once the board is fixed in place supports must be provided to keep the boards in place till the adhesion is strong enough to hold the board. Subsequent boards shall be laid continuously by butt fitting the edges. For irregular profiles the board shall be cut to fit all intersections.

### APPLICATION TOOLS AND EQUIPMENT

- Gloves, face mask, coveralls, and safety goggles
- Flame torch & LPG cylinder -Brush / roller
- Steel scrapper
- Cotton waste
- Solvent cleaner
- Measuring tape
- Cutting knife, scissors

Application of protection board should be avoided in case of extreme weather. The ambient temperature during application should be between 4 °C and 45 °C

### PACKAGING AND STORAGE

Gulfboard are stacked over pallets and wrapped. Store on ground level in dry and shaded area the pallets should be loaded or off loaded with the help of crane or forklift to prevent damage. Stack not more than one pallet high.

- Keep the products packed in a dry place.
- Keep away from direct sunlight.



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### TECHNICAL SUPPORT

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Clearing the substrate



Application of primer



Prepare the torch & cylinder



Unrolling the membrane



Apply torch on membrane

**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.

# BITUPRIMER

Bituminous roofing primer

## DESCRIPTION

Bituprimer is a cold applied general purpose roofing primer used as dressing to concrete, masonry, and metal surface. And as the primer coat prior to application of Bitugulf membranes.

## APPLICATIONS FEATURES

Bituprimer is a bituminous liquid that penetrates deep into the porous substrates to improve the adhesion of bituminous materials that are to be applied to the substrate.

## APPLICATIONS

- The surface must be thoroughly cleaned and all dust, dirt, oil, and grease to be removed.
- Bituprimer should be well stirred prior to use and applied to the substrate by means of brush, roller or spray.
- After application don't leave the primer exposed for more than 24 hours, if this should be the case, apply a further coat and allow curing. Tools may be cleaned with any solvents.



## DRYING TIME

Less than four hours, to touch depends on local weather conditions.

## COVERAGE RATE

Coverage rate varies from 0.2 - 0.3 kg/m<sup>2</sup> depending on application method, surface properties and condition of substrates.

## PACKAGING

Bituprimer is supplied in 180-kg drums and 15-kg pails. Each drum/pail bearing the product name and batch code.

## Technical Data

PROPERTIES	RESULTS	TEST METHOD
Color	Black	-----
Viscosity saybolt furol @ 25 °C	25 - 125-Cps.	ASTM D88
Density @ 25 °C	0.92 - 0.93 kg./ltr.	ASTM D70
Drying time	3 - 4 Hours	In IIC Lab
Drying time through	24 Hours	In IIC Lab
Water Content %	0.5 Max	ASTMD6511/ D95
Flash Point	50 °C	ASTM D94
Shelf life	2 - Years	-----

Coverage	
1 Kg	3.3 to 5 m <sup>2</sup>
15 kg	50 to 75 m <sup>2</sup>
180 Kg	600 to 900 m <sup>2</sup>

The information given in this data sheets is the average of test of various samples conducted under lab conditions.  
\*In accordance to ASTM and UAEAc Standards results are subjected to 5 to 20% tolerance.

# BITUPRIMER

Bituminous roofing primer

## STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.



# HEALTH, SAFETY AND ENVIRONMENT

- Use only with proper ventilation.
- Avoid contact skin and eyes by careful working.
- Do not use near open flame.
- It is advisable to use goggles and gloves.
- In case of eye contact immediately wash with cold water or consult the physician

All safety measures should be observed during application. Fire extinguishers should be available at site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

## TECHNICAL SUPPORT

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NATIONAL ROOFING  
CONTRACTORS ASSOCIATION  
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# BITUPRIMER - D41

Solvent Based Bituminous Primer

## DESCRIPTION

Bituprimer D-41 is a solvent based bituminous primer suitable for general purpose roofing primer used as dressing to concrete, masonry and metal surface and as a primer coat prior to application of BITUGULF membranes.

## APPLICATIONS

- A cold applied solvent based bituminous primer
- A bituminous liquid primer penetrates deep into the porous substrates to improve the adhesion of bituminous materials that are to be applied to the substrate.
- Conforms to the requirements of ASTM D41

## DRYING TIME

- General purpose primer for concrete, masonry and metal surfaces.
- As priming coat before applying and bituminous coating
- As priming coat before applying any waterproofing membrane
- Suitable for use as primer below or above ground level



## COVERAGE RATE

Coverage rate varies from 0.3 - 0.5 kg/sq.mt depending on application method, surface properties and condition of substrates

## DYING TIME

Less than four hours, to touch depends on local weather conditions.

## APPLICATION TOOLS & EQUIPMEN

- The surface must be thoroughly cleaned and free from dust, dirt, oil, and grease
- Bituprimer D-41 should be well stirred prior to use and applied to the substrate by means of brush, roller or spray.
- After application don't leave the primer exposed for more than 12-hours, if this should be the case, apply a further coat and allow curing.
- Tools may be cleaned with any suitable solvents such as gasoline or kerosene.

## Technical Data

PROPERTIES	RESULTS	TEST METHOD
Color	Black	---
Viscosity Saybolt @ 25 °C	25 – 125 sec	ASTM D 88
Specific gravity @ 25 °C	0.958	ASTM D 1475
Solubility in trichloro ethylene	99.7%	ASTM D 2042
Density	0.85 - 0.89	ASTD D 70
Distillation volume @ 225 °C	37%	ASTM D - 402/D422
Distillation volume @ 260 °C	39.5%	ASTM D - 402/D422
Distillation volume @ 360 °C	42.5%	ASTM D - 402/D422
Asphalt residue @225 °C	63%	ASTM D -402
Asphalt residue @260 °C	60.5%	ASTM D -402
Asphalt residue @360 °C	57.5%	ASTM D -402
Water Content %	<0.3 Max	ASTM D6511/D95
Flash Point	45 OC	ASTM D 94
Drying time	8 - 12-Hours	In house
Coverage rate	0.3 - 0.5 Kg/mt2	In house
Shelf life	2-years	In house

The information given in this data sheets is the average of test of various samples conducted under lab conditions.  
\*In accordance to ASTM and UEA/C-Standards results are subjected to 5 to 20% tolerance.

# BITUPRIMER - D41

Solvent Based Bituminous Primer

## STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.



# HEALTH, SAFETY AND ENVIRONMENT

- Use only with proper ventilation.
- Avoid contact skin and eyes by careful working.
- Do not use near open flame.
- It is advisable to use goggles and gloves.
- In case of eye contact immediately wash with cold water or consult the physician

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

## TECHNICAL SUPPORT

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**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.

# SEALCOAT - D41

Highly Penetrative Bituminous primer

## DESCRIPTION

Sealcoat D41 is a solvent based cold applied, highly penetrative thin bituminous solution in black color.

## USES

- For priming concrete, masonry, metal and asphalt surfaces.
- Suitable for use as priming coat before applying any bituminous coating, or modified bitumen membrane in roofing, dam proofing, and waterproofing below or above ground level.

## SURFACE PREPARATION

Surface must be clean, free from dirt, dust, oil and grease. New concrete must be fully cured, and dried before priming.



## STANDARD

SEALCOAT D41 complies with the requirements of JS 674-90 and ASTM D41- 05 Type I.

## COVERAGE

It covers from 0.2 to 0.3 Kg/m<sup>2</sup> depending on application method, surface properties and condition of substrates.

## DRY TIME

It dries to touch in 2-4 hours. But the time needed to complete dry is from 12 to 24 hours dependent on prevailing conditions.

## Technical Data

PROPERTIES	RESULTS	TEST METHOD
Color	Black	-----
Viscosity@ 25 °C	25 – 125 sec	ASTM D88
Specific gravity @ 25 °C	Min 0.89	ASTM D1475
Solubility in trichloro ethylene	99.7%	ASTM D2042
Distillation volume @ 225 °C	37%	ASTM D402
Distillation volume @ 360 °C	42.5%	ASTM D402
Asphalt residue @ 225 °C	63%	ASTM D402
Asphalt residue @ 360 °C	57.5%	ASTM D402
Penetration @ 25 °C for Asphalt residue @ 360 °C	< 50 dmm	ASTM D5
Water Content %	<0.5	ASTM D95
Flash Point	45 °C	ASTM D94
Drying time through.	8 – 12 Hours	In house
Shelf life	2-years	In house

Coverage	
1 Kg	3.3 to 5 m <sup>2</sup>
15 kg	50 to 75 m <sup>2</sup>
180 Kg	600 to 900 m <sup>2</sup>

## APPLICATION TEMPERATURE

It can be applied at a temperature between 2 °C and 50 °C.

## APPLICATION

The primer is applied on a single coat. It should be well scrubbed in by brush, ensuring only a thin coating is applied or applied thinly but evenly by spray.

The information given in this data sheets is the average of test of various samples conducted under lab conditions.  
\*In accordance to ASTM and UEAtc Standards results are subjected to 5 to 20% tolerance.

# SEALCOAT - D41

Highly Penetrative Bituminous primer

## CONTAINERS

SEALCOAT D41 can be supplied in 15 kg pail and 180 Kg drum.

## STORAGE

Store in tightly closed containers under cover and away from sources of heat and ignition.

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.



# HEALTH, SAFETY AND ENVIRONMENT

- Use only with proper ventilation.
- Avoid contact skin and eyes by careful working.
- Do not use near open flame.
- It is advisable to use goggles and gloves.
- In case of eye contact immediately wash with cold water or consult the physician

All safety measures should be observed during application. Fire extinguishers should be available at site. Care should be taken with gas, and torch should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

## TECHNICAL SUPPORT

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# AQUAPROOF

Cold Applied Bitumen Emulsion

## DESCRIPTION

AQUAPROOF is a cold applied bitumen emulsion, which gives dark Black layer when dry, which can be used as primer for Bitugulf membrane products

## USES

- General purpose water proofing coating.
- Damp proofing coating, suitable to use for below ground concrete foundations, basements, and retaining walls.
- Can be used in conjunction with asphalt- saturated organic felt, fiber-glass or polyester mat or jute.
- A moisture vapor barrier on block works
- and concrete surface prior to cladding.



## FEATURES

- Easy to apply by brush.
- Environment friendly, solvent free.
- Non-flammable, safe to use.
- Chemicals resistant.
- Resistance to alcohol, most salt solutions and dilute acids and alkalis.
- Resistant to weather conditions

## APPLICATION

- Stir AQUAPROOF to homogeneity & apply by brush or Roller the first coat at a rate of 2-3 mt<sup>2</sup>/kg. coat.
- To ease application, dampen the surface with water before and during use.
- Allow the first coat to dry (1-4 hours depending on weather conditions).
- Apply the second coat at the same rate and right angle to the first coat.
- Protect from frost and rain until fully cured.

## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Specific Gravity	980 ± 2		ASTM D 2939
Residue by evaporation	35 ± 5	%	ASTM D 2939
Viscosity	10 to 5 Sec. Saybolt at 25°C	Cps	-
Drying Time	3 – 4 hr.	Hr.	ASTM D 2939
Flammability	No tendency to flash or ignite		ASTM D 93

## Coverage

1 Kg	2 to 3 m <sup>2</sup>
15 kg	30 to 45 m <sup>2</sup>
180 Kg	360 to 540 m <sup>2</sup>

## CONTAINERS

- AQUAPROOF can be supplied in 15-kg. pail & 180 kg. /Drum.

## SURFACE PREPARATION

Clean off all dirt, dust, grease, oil or any other contaminated prior to the application of AQUAPROOF

For porous surfaces, we recommend to apply two (2) full coats of Aquaproof.

# AQUAPROOF

Cold Applied Bitumen Emulsion

## CLEANING

- Clean immediately after use, with water.
- Use kerosene or white spirit if the material has dried.
- During work, place tools in water while not in use.
- Note: AQUAPROOF is applied on damp or dry surfaces.
- Note: stir well before use

## STORAGE

- Keep containers well closed.
- Store under cover at temperatures between 5°C and 40 °C.
- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.



# HEALTH, SAFETY AND ENVIRONMENT

- Fire: Non- flammable.
- Skin contact: Avoid repeated or prolonged contact with skin.
- Eye contact: Protect the eyes from splashes by wearing goggles. If splashed, irrigate with clean water and consult the nearest physician.

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

## TECHNICAL SUPPORT

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# AQUAPROOF - 6010

A high quality bitumen emulsion  
With minimum 10% rubber content on dry film

## DESCRIPTION

Aquaproof-6010 is a high-quality bitumen emulsion. With minimum 10% rubber content on dry film. Designed to use as a damp proof membrane, vapors barrier, waterproofing and protective coating.

## STANDARDS

Aquaproof - 6010 complies with performance requirement of ASTM D 1227 Type III, Class I. Tested in accordance with ASTM D 2939 and other relevant international standards.

### Certificates

The manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 EM and ISO 45001 OH & S.

## CHARACTERISTICS/ ADVANTAGES

- Single component and easy application (Brush, roller or airless spray)
- No heating required (cold application)
- Suitable for closed places applications (solvent free)
- Can be applied over damp surfaces
- Excellent adhesion to damp and dry surfaces.
- High resistance to dilute acids and alkalis
- Odorless and non-toxic
- Suitable for use for below ground concrete foundations, basements, and retaining walls, column necks, ground beams and other



## APPLICATION

- Stir AQUAPROOF to homogeneity & apply by brush or Roller the first coat at a rate of 2-3 mt<sup>2</sup>/kg. coat.
- To ease application, dampen the surface with water before and during use.
- Allow the first coat to dry (1-4 hours depending on weather conditions).
- Apply the second coat at the same rate and right angle to the first coat.
- Protect from frost and rain until fully cured.

## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Specific Gravity	980 – 1040		ASTM D 2939
Ash Content of Residue	< 8%	%	ASTM D 2939
Water Content	50%	%	ASTM D 95
Residue by evaporation	53 ± 5	%	ASTM D 2939
Viscosity	4,000 – 6,000	Cps.	-
Firm Set	< 20 hr.	Hr.	ASTM D 2939
Drying Time	4-8 hrs. @ 25 °c 2 hrs. @ 35 °c (depends on ambient temperature, humidity & layer thickness)	Hr.	ASTM D 2939
Rubber Content	10% on dry film	%	
Surface Finish	Smooth, Free from Sags, runs or surface imperfections		ASTM D 1227
Flammability	Notendency to flash or ignite		ASTM D 93
Adhesion Strength	Excellent		ASTM D 1227
Chemical Resistance	Excellent		ASTM D 543

Coverage depending on substrate	
1 Kg	2 to 3 m <sup>2</sup>
15 kg	30 to 45 m <sup>2</sup>
180 Kg	360 to 540 m <sup>2</sup>

## GENERAL INFORMATION

### Packaging

15-kg. pails and 180-kg. Drums

### Shelf life

12 months from date of production if stored in original unopened packing in dry condition and away from sunlight.

### Color

Dark brown liquid turns to black film after drying

# AQUAPROOF - 6010

A high quality bitumen emulsion  
With minimum 10% rubber content on dry film

## INSTRUCTIONS FOR USE

### PRIMING

Normally priming is not required, however priming the surface is recommended when the surface is very dry and porous. For priming use one coat of Bitugulf AQUAPROOF

### SURFACE PREPARATION

Surfaces must be clean, sound and free from oil, grease, dirt, dust and loose particles. It is desirable to dampen the surface with water if the concrete or block work is dry.

### APPLICATION

Stir well before use. As damp-proof membrane, two coats of Aquaproof - 6010 are recommended. Apply the first coat at a thickness of 200 to 500 microns. Allow a minimum of 4 hours between the first coat and the second coat. The second coat should be applied at right angles a third coat is required for very porous substrate.

### CLEANING TOOLS

Clean tools in soap and water immediately after use. Dried emulsion can be removed with the help of any solvent.



# HEALTH, SAFETY AND ENVIRONMENT

- Gloves, goggles and normal mask should be worn by all workers during application.
- When contact with skin, eyes immediately wash abundant water.

There are no health hazards associated with Aquaproof - 6010.

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### TECHNICAL SUPPORT

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# AQUAPROOF - RBE

A rubber modified bitumen emulsion. It dries to form a black, flexible coatings

## DESCRIPTION

AQUAPROOF - RBE is a rubber modified bitumen emulsion. It dries to form a black, flexible coating

## SPECIFICATION

ASTM D 1227 Type III, Class 1.

### Certificates

The manufacturing facility is certified with the ISO 9001:2015 QMS, GMP, ISO 14001 E M and ISO 45001 OH & S.

## CHARACTERISTICS/ ADVANTAGES

- Single component and easy application (Brush, roller or airless spray)
- No heating required (cold application)
- Suitable for closed places application (solvent free)
- Can be applied over damp surfaces
- Excellent adhesion to substrate
- High resistance to dilute acids and alkalis
- Suitable for use for below ground concrete foundations, basements, and retaining walls, column necks, ground beams and other structures liable to be back filled.



## Technical Data

PROPERTIES	RESULTS	UNIT	TEST METHOD
Specific Gravity	980-1040		ASTM D 2939
Ash Content of Residue	< 8	%	ASTM D 2939
Water Content	50	%	ASTM D 95
Residue by evaporation	47 – 53	%	ASTM D 2939
Viscosity	1500 – 2000	Cps.	-
Firm Set	< 20	Hr.	ASTM D 2939
Drying Time	< 8	Hr.	ASTM D 2939
Rubber Content	4% on dry film	%	
Coverage Rate Depending on substrate	3 – 4	ms/Kg.	-
Surface Finish	Smooth, Free from Sags, runs or surface imperfections		ASTM D 1227
Flammability	No tendency to flash or ignite		ASTM D 93
Adhesion Strength	Excellent		ASTM D 1227
Chemical Resistance	Excellent		ASTM D 543
Resistance to Artificial Sea Water	Film shows rating : 2 (S2) Exposed Metal: No Rust		BS 6949:1991

Coverage	
1 Kg	3 to 4 m <sup>2</sup>
15 kg	45 to 60 m <sup>2</sup>
180 Kg	540 to 720 m <sup>2</sup>

## GENERAL INFORMATION

### Packaging

15-kg. pails and 180-kg. Drums

### Shelf life

12 months from date of production if stored in original unopened packaging in dry condition and away from sunlight.

### Color

Dark brown liquid turns to black film after drying

The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEAC Standards results are subjected to 5 to 20% tolerance.

# AQUAPROOF - RBE

A rubber modified bitumen emulsion. It dries to form a black, flexible coatings

## INSTRUCTIONS FOR USE

### PRIMING

Normally priming is not required, however priming the surface is recommended when the surface is very dry and porous. For priming use one coat of Bitugulf AQUAPROOF

### SURFACE PREPARATION

Surfaces must be clean, sound and free from oil, grease, dirt, dust and loose particles. It is desirable to dampen the surface with water if the concrete or block work is dry.

### APPLICATION

Stir well before use. As damp-proof membrane, two coats of Aquaproof - RBE is recommended. Apply the first coat at a thickness of 200 to 500 microns. Allow a minimum of 4 hours between the first coat and the second coat. The second coat should be applied at right angles as curing compound, one coat of Aquaproof RBE is sufficient it can be applied on the green concrete this would prevent rapid evaporation of water and formation of shrinkage cracks.

### CLEANING TOOLS

Clean tools in soap and water immediately after use. Dried emulsion can be removed with the help of any solvent.



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.

### TECHNICAL SUPPORT

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**MEMBER**

## DESCRIPTION

Bitusilver is a cold applied highly reflective aluminum bitumen coating. Special mixture of high-quality bitumen dissolved in selected petroleum solvents and blended with a special aluminum paste.

## FEATURES AND BENEFITS

- Easy to apply, no heating or thinning.
- Reflecting up to 70% of the harmful sunrays, thus prolonging the life of bitumen roofs.
- Highly resistance to UV rays.
- Low thermal conductivity, saving in heating and cooling costs.
- Seamless and smooth finish forms an excellent reflective and waterproof coat upon drying.

## USES

- To preserve, protect and beautify modified bitumen smooth and granules waterproofing membranes.
- To protect metal structure and is an anti-rust and corrosion coating.
- It can be used on vertical and horizontal structures made of concrete, metal and masonry.

## STANDARDS

Complies with ASTM-D 2824 type I

## COVERAGE

- Approx. 0.16 kg/mt<sup>2</sup> on metal, wood or smooth bituminous surfaces.
- Approx. 0.27 kg/mt<sup>2</sup> on granule, rough or concrete surfaces.

## APPLICATION

### APPLICATION ON POROUS SUBSTRATES

Thoroughly clean the surface to be coated. All dirt, dust, scale, grease, oil and other loose particles.

It can be applied by paint brush, squeegee or airless spray equipment at the recommended coverage rates.

All brush strokes should be in one direction and temperature above 20 °C. Thoroughly mix before and during application.

### APPLICATION ON METAL STRUCTURES

On old metal or galvanized steel, remove rust and scale with a wire brush. Pre-treat new galvanized steel surface with diluted acid.

## Technical Data

PROPERTIES	RESULTS	TEST METHOD
Density @ 25 °C kg/liter	0.91 – 1.0	ASTM-D 70
Dry film thickness 1 Liter/ mt <sup>2</sup> (mm)	0.3	-
Cured Colour	Bright Silver	-
Wet Colour	Black	-
Dry to touch Hr.	2 to 3 Hr.	-
Through Drying time Hr.	24 Hr.	-
Reflectance %	70	ASTM-D 2824
Resistance to heat @ 60°C	No sagging or blistering	-
Service temperature °C	-5 to 60	-
Non-volatile % Wt.	50	ASTM-D 2824
Volatile % Wt.	50	ASTM-D 2824
VOC, grams/liter	500	-
Metallic Aluminum Content % Wt.	15	-

## CLEANING

Spray equipment and brush should be cleaned immediately after use by a suitable solvent. Hands use hand cleaner followed by soap and water.

The information given in this data sheets is the average of test of various samples conducted under lab conditions.  
\*In accordance to ASTM and UAE standards results are subjected to 5 to 20% tolerance.

# BITUSILVER

Acold applied highly reflective aluminum bitumen coating

## STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.

## TECHNICAL SUPPORT

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# HEALTH, SAFETY AND ENVIRONMENT

Gloves, goggles and normal masks are worn. When contact with skin, eyes immediately wash abundant water

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

- Bitusilver is solvent based that gives inflammable vapor, during application wear proper personal protective equipment.
- Ensure proper ventilation if used in the enclosed area.
- Keep away from sources of sparks or ignition.
- Avoid skin contact; if contact occurs remove with hand cleaner then clean with soap and water.
- Avoid eyes contact, if contact occurs flush with clean water.
- Avoid inhalation; if inhalation occurs move to fresh air area and if breathing difficulty persist, administer oxygen.

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# BITUCEM - 2M

Polymer Modified Elastomeric Cementitious Waterproofing Coating

## DESCRIPTION

BITUCEM 2M is a two-component flexible waterproofing coating for application on cementitious substrates, cement boards, natural stones etc., to prevent ingress of moisture and corrosive atmospheric gases into the coated substrate. The product is supplied as a two-component material comprising of pre proportioned quantity of Powder (Part A), a mixture of cement, aggregates and special additives and a latex Polymer liquid component (Part B), which are ready to mix and use at site.

**Uses** BITUCEM 2M is suitable for application as:

Complies to BS 6920:2000 for use in Potable Water applications

- Cement based waterproofing coating for Roofs, underneath ground slabs, Wet Areas, Swimming Pools, Water Tanks, Balconies, Internal surface of basements, lift pits, sumps etc.
- Damp proof coating on brick masonry and blockwork.
- Sealing of shrinkage and dynamic cracks with limited movement arising due to thermal effects and rebar corrosion.
- Protective coating on concrete surfaces to prevent ingress of moisture and corrosive atmospheric gases.
- Waterproof sealer coat on the rear side of fully bonded or mechanically fixed natural stones.
- Waterproofing coating on cement boards.

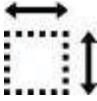


## FEATURES & BENEFITS

- Pre proportioned component for easy mixing and use at site.
- Moisture tolerant.
- Elastomeric coating capable of accommodating substrate cracking within the permissible limits.
- Non-toxic, Suitable for use in contact with potable water

## PROPERTIES

PROPERTIES	RESULTS
Form	Part A - Powder Part B - White Liquid
Colours	Grey, White
Density	1.85 kg/ltr
Pot Life @ 25°C	40 minutes
Water Penetration (DIN 1048)	5 Bar (50m water head)
Crack Bridging Ability {ASTM C1305}	Pass
Adhesion {ASTM D7234}	1 Mpa
Water vapour transmission {ASTM E96}	rate 1.4 gms/m <sup>2</sup> , 24 hours
Elongation {ASTM D 638}	70%

## ADDITIONAL INFORMATION

	<b>THEORETICAL CONSUMPTION*</b> 13.50 sqm per pack at 1mm thickness/ coat
	<b>PACK SIZES</b> 25 kg
	<b>SHELF LIFE</b> 12 months from date of manufacture if stored in shaded and dry area.

\*Coverage rate mentioned above are theoretical and may vary depending on the substrate condition.

- Can be applied in confined areas.
- Excellent bond strength to concrete, natural stones and cement boards.
- Resistant to microbial growth.
- Capable of withstanding pedestrian traffic.
- Available in white and grey colours.
- Environmentally friendly product with low voc.

## APPLICATION METHODOLOGY SURFACE PREPARATION

Proper surface preparation is essential for effective adhesion of coating to the substrate. Surfaces shall be prepared using wire brush, grinder or light blasting, depending on the extent of contamination and type of substrate, to remove loose materials, mortar splashes, oil spillage, paint etc. Hard deposits such as salt, efflorescence and sharp protrusions must be grinded off. Prepared surface must be cleaned with water jet prior to applying the BITUCEM 2M coating.

## PRIMING

Cementitious and natural stone surfaces must be pre wetted and preferably in saturated surface dry condition prior to applying BITUCEM 2M. Failure to do so may result in inadequate adhesion of coating to the substrate. Cement Particle / Gypsum board surfaces shall be primed with a diluted coat BITUCEM 2M Liquid with water (1:1) or SBR and allowed to dry prior to applying the coating.

## MIXING

Mixing must be carried out using a mechanical mixer to achieve the right mix consistency. Pour Part B (Liquid Component) into a suitable metal or plastic container of minimum 20 litres capacity and add the Part A (Powder component) slowly while keeping the mixer running. Mix continuously for 3-5 minutes until a lump free mix of homogenous consistency is obtained.

# BITUCEM - 2M

Polymer Modified Elastomeric Cementitious Waterproofing Coating

## APPLICATION

Waterproofing Coating: Mixed BITUCEM 2M shall be applied on the prepared substrate using stiff nylon brush, roller or trowel. Spray application is possible using a pneumatic spray machine with hopper spray gun. Apply the first coat evenly at an application rate of 1.85kg/sqm and allow to become touch dry. This will take approximately 6-12 hours. The second coat must be applied in right angle to the first coat at an application rate of 0.95-1.85 kg/sqm. Ensure that the total coating thickness is 1.5-2mm in 2 coats.

## FOR SEALING SURFACE CRACKS:

Apply a 100mm band of BITUCEM 2M across the crack. A 50gsm glass fibre mesh reinforcement must be used between the first and second coat.

## PIPE PENETRATIONS, CORNERS & INTERSECTIONS:

It is preferable to use the glass fibre mesh of 50 gsm between the first and second coat to Reinforce the coating around pipe penetrations, corners and intersections between horizontal and vertical surfaces to ensure adequate application thickness.

## CURING

Applied BITUCEM 2M coating must be allowed to dry for 24 hours prior to opening for light foot traffic. Flood Test shall be carried out after 48 hours of application of coating. Application of protection screed shall be carried out after 48 hours of curing. Consult Technical Department prior to using the product beyond the purview stated in this product datasheet.

## APPLICATION RESTRICTIONS

- Avoid application during ambient temperature below 5 ° C and above 40 ° C.
- Improper pre wetting of substrate will affect adhesion and performance of cured coating.
- Application at higher thickness may result in surface cracking of the coating.
- Not to be applied on surface with standing water.
- Do not mix and reuse hardened material.

## STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.

## TECHNICAL SUPPORT

International Insulation Company (IIC) - Bitugulf technical support team consist of expert engineers offers a comprehensive service support to specifiers, end users and contractors, and on-site technical assistance.

## HEALTH, SAFETY AND ENVIRONMENT

- Gloves and goggles should be worn by all workers during application.
- Do not breathe vapor from products.
- Use only in well-ventilated areas.
- Avoid contact with eyes or skin.
- In case of contact with eyes, rinse immediately with plenty of clean water and seek medical help.

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

## GENERAL TERMS & CONDITIONS:

Users must always refer to the most recent data sheet. Upon request, additional copies will be provided. This technical data sheet is given in good faith and does not guarantee the optimum utility of the product always. The information contained herein is believed to be reliable to the best of our knowledge. Bitugulf is exempted from all legal liability in case of injury incurred from product handling without appropriate technical precautions. Bitugulf reserves the right to change the product specifications or properties. All orders are considered based on current delivery and sale infrastructures.



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**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.

# BILATEX - SBR

SBR Bonding Agent

## DESCRIPTION

BILATEX SBR is a water dispersion of Styrene Butadiene Copolymer. It is characterized by high bonding force and water resistance. It is stable when mixed with wet alkaline conditions. When mixed with concrete, it creates a reinforcing bonding matrix with the cement.

BILATEX SBR when added to cementitious mix enhances the mix with higher bonding adhesion power to the substrate, with superior elasticity, impermeability and flexure resistance. The product also improves the abrasion and acid characteristics of cured mix.

BILATEX SBR is suitable for application in concrete, sand/cement mix, flooring screeds and repair compounds. It can be used externally and internally in areas of intermittent or continuous water content. It is especially suitable for renders and as primer to concrete flooring to provide high bonding onto the substrate of low permeability.



## APPLICATIONS

- To prepare bonding slurry between old and new concrete.
- Can be added to cement floor screed mixes.
- Additive to enhance water proofing and flexibility for mortars.
- Additive to cementitious tile adhesives to improve flexibility.
- As a primer for cementitious concrete repair products.
- Can be coated on top of repair products to act as a curing compound.
- To increase the adhesion power of cementitious products.
- To prepare repairing mortar, cementitious rendering, cement slurry, floor screed, high flexible plastic etc. Please refer to the below dosage table. For more details about application, please contact BITUGULF Technical Department.

## STANDARDS

BILATEX SBR conforms to:

- BS 1199,
- ASTM C109. ASTM C 190, ASTM C932-12

## Technical Data

PROPERTIES	RESULTS
Appearance	Fluid liquid
Density	1.05 kg/Lt.
Solid Contents	40%

### As Bonding Agent Slurry:

Tensile Bond Strength: 2.5 N/mm<sup>2</sup>

### As Screed mixed with BILATEX SBR

PROPERTIES	RESULTS
Tensile Strength (50mm <sup>3</sup> )	4.0Mpa.S
Flexural strength	10 Mpa.S
Flammability	Non Flammable
Temp. Resistance	-25°C to +90°C
Temp. of Application (Substrate)	+5°C to +40°C

## DOSAGE TABLE

USE	MIXTURE RATIO		WEIGHT RATIO	
	BILATEX SBR	Water	Cement	Inert
Primer in casting resumption	1	1	3	-
Anchorage mortar	1	1	2	-
Plastering up to 10 mm	1	1	1	3
Screeds from 10 to 50 mm	1	2	1	3
Tiles fixing	1	1	1	2
Patching and repair mortars	1	1	1	3

## ADVANTAGES

- Improves adhesion and bonding.
- Suitable for use in damp conditions.
- Improves workability, strength and abrasion resistance.
- Reduces shrinkage and cracking and improves flexibility.
- Improves chemical and water resistance.
- Allows reduction in water content.
- Can be used with concrete in portable water tanks.

The information given in this data sheets is the average of test of various samples conducted under lab conditions.  
\*In accordance to ASTM and UEATc Standards results are subjected to 5 to 20% tolerance.

# BILATEX - SBR

SBR Bonding Agent

## INSTRUCTIONS FOR USE

### SURFACE PREPARATION

All surfaces should be sound free from laitance, oil and grease. In case of hard or deep contamination, surface should be cleaned using mechanical scrubbing or grit blushing to reach a fresh clean exposed concrete surface.

### BILATEX SBR as bonding slurry

Mix BILATEX SBR with water and cement 1:1:3 and apply as a bonding slurry between fresh concrete and old concrete, the SBR Bonding Slurry ensures adhesion between new and old concrete additives.

### ADDITIVE FOR SCREED FLOORING APPLICATION

The substrate should be saturated with water to avoid possible absorption of water of the mix. Always apply bonding slurry to the substrate before pouring the screed. This acts as anchorage bonding between the floor screed and the substrate. Ensure that the screed is poured while the bonding slurry is still fresh.

### ADDITIVE FOR CONCRETE REPAIR

Be sure to remove all the damaged parts to ensure a sound substrate. Steel reinforcement should be protected against rust.

### APPLICATION

The diluted bonding agent should be added to the cement mixer and then the cement and aggregate contents can be added. Mix for few minutes till a homogenous, lump free mix is achieved.

### MIXING

BILATEX SBR is ready for direct use. The product must be diluted with water depending to application requirements. Refer to the dosage table below. For further information contact BITUGULF Technical Department.



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### SHELF LIFE

BILATEX SBR can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

### PACKAGING

BILATEX SBR is supplied in 5 liter, 20 liter jerrycans and 200 liter drums.

### STORAGE

- Keep the products packed in a dry place.
- Store in original packing in dry conditions away from direct sunlight.

### TECHNICAL SUPPORT

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NATIONAL ROOFING  
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**MEMBER**

# BITUSTOP PVC WATERSTOP

PVC Waterstops are extruded from high-grade PVC compounds, designed for sealing movement and construction joints in reinforced concrete structures in blue colour

## DESCRIPTION

BITUSTOP PVC Waterstop are extruded from high-grade PVC compounds, designed for sealing movement and construction joints in reinforced concrete structures in blue color.

## ADVANTAGES

- Will accommodate movement during construction and service life
- Ease of use simple on-site jointing
- Full range of factory welded and fabricated intersection pieces to suit every need
- Brass reinforced eyelets edge flanges to ensure perfect fixing
- Approval for use in contact with potable water

## USES

Bitustop PVC Waterstop used in concrete for the sealing of construction and expansion joints, are embedded in concrete across and along the joint, to form a continuous watertight diaphragm that prevents the passage of the fluid through the joint. The many shapes centrally and externally placed allow lasting watertight seals in any grade of construction design. They are typically used in water retaining and excluding structure such as: reservoirs, sewage tanks, dams, pools, basements, tunnels retaining walls, etc.

## STANDARD COMPLIANCE

- BS 2782:320A
- U.S. Corps of Engineers CRD-C 572-74

## PACKAGING SPECIFICATIONS

Bitustop PVC Watertop is supplied in 12 meters to 20 meters per roll.

## SITE JOINING

Welding can be used to join the Bitustop PVC Waterstops. The ends to be joined are cut flat and held in alignment in a special jig. The ends are heated with welding equipment until the PVC gets plastic and then immediately pressed together.

## PRECAUTIONS

Hydrogen chloride mist and vapour may be released while welding PVC Waterstops. Therefore, forced ventilation must be provided or a suitable respirator used.

## Technical Data

PROPERTIES	RESULTS	TEST METHOD
Tensile Strength	>13 N/mm <sup>2</sup>	ASTM D412 ASTM D638
Tear Resistance	285lbs./in – 50KN/m	ASTM D624
Water Absorption	2%	ASTM D570
Low Temperature Brittleness @ (-37°C)	No failure	ASTM D746
Solid Content	100%	-
Toxity	Non-toxic 1	-
Hydrostatic head 250mm profile	Up to 100 m	
Hydrostatic head 200mm profile	Up to 50 m	-
Joint movement	Up to 10 m	-
Elongation at break point	>300%	After Accelerated CRD-C572
Elongation at break point	Min 250%	Normal ASTM D630
Hardness	Shoer "A" 65-80	ASTM D2240
Specific gravity	1.4	ASTM D792

## STORAGE

No shelf life if kept in cool and dry conditions.

## THE SELECTION AND REQUIREMENTS OF A WATERSTOP

- Installation must be to ensure close and smooth joint.
  - A smooth profile is essential for the intimate compaction of fine quality dense concrete on its surface.
  - Resistance of maximum stress at the anchorage points consistent with their distant location from the joint where the section spans.

# BITUSTOP PVC WATERSTOP

PVC Waterstops are extruded from high-grade PVC compounds, designed for sealing movement and construction joints in reinforced concrete structures in blue colour

## HEALTH, SAFETY AND ENVIRONMENT

- High level of rigidity facilitate installation consistent with economy and other necessary qualities.
- b) Centrally placed waterstop; sections cast in slabs or walls in concrete structure can prevent water seepage. They fit to water retaining structures and in walls and slabs where pressure differentials may occur, i.e. reservoirs walls. They fit its joints in suspended slabs, ground floor slabs, vertical wall joints and lift joints.
- c) Externally placed waterstop: it fits to basement and foundation construction where it supports firmly against back pressure, i.e. in or beneath water excluding structures where it is firmly supported by the base formation.
- d) The width of waterstop is subjects to the thickness of the concrete, the size of the aggregate and the position of the reinforcement. Below are the smart tops for satisfactory choices.
  - The overall width of the waterstop should not be greater than that of the concrete into which is cast.
  - The distance between the concrete and the waterstop must be greater than half the width of the waterstop.
  - For satisfactory compaction result, the width of the waterstop should be more than six times the size of the largest aggregate. (Example: for use in contraction joint, when the aggregate size is 20 mm, the width of the waterstop must be more than  $6 \times 20 = 120\text{mm}$ )
  - The distance between the waterstop and reinforcement members should be more than twice the size of the largest aggregate, or an unsatisfactory compaction may result.

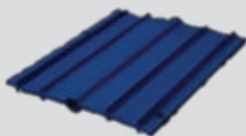


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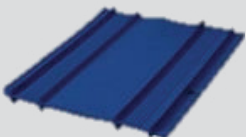

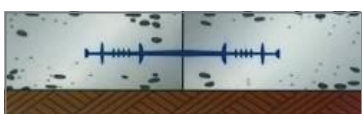
### TECHNICAL SUPPORT

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#### TYPE 2 : INTERNAL EXPANSION JOIN

MODEL	PRODUCTS	SIZE	
C-250			

#### TYPE 4 : INTERNAL CONSTRUCTION JOINT

MODEL	PRODUCTS	SIZE	
W-250			

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# BITUSTOP PVC WATERSTOP

PVC Waterstops are extruded from high-grade PVC compounds, designed for sealing movement and construction joints in reinforced concrete structures in blue colour

## TYPE 1 : EXTERNAL EXPANSION JOINT

MODEL	PRODUCTS	SIZE	
KC-250			

## TYPE 3 : EXTERNAL CONSTRUCTION JOINT

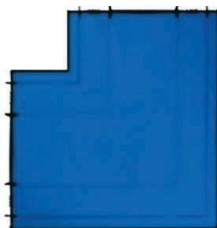
MODEL	PRODUCTS	SIZE
KW-250		



Middle-Set-Type and External-Set-Type  
Three-Dimensional T Shape



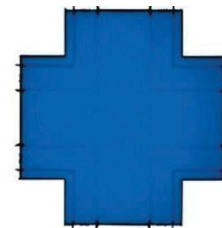
Middle-Set-Type and External-Set-Type  
Three-Dimensional 90°



90° Flat



T-Piece Flat



Cross Piece Flat

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# BITUSTOP PVC WATERSTOP

PVC Waterstops are extruded from high-grade PVC compounds, designed for sealing movement and construction joints in reinforced concrete structures in blue colour



90° Vertical



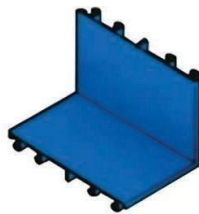
T-Piece Vertical



Cross Piece Vertical



90° Vertical Type I



90° Vertical Type E



Heater Blade



Jointing Jigs

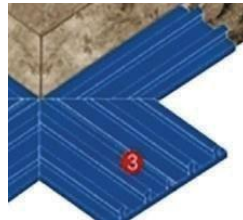
## INSTALLATION DRAWING



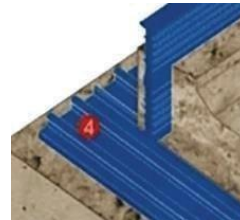
INTERNAL CONSTRUCTION JOINT PVC WATERSTOP



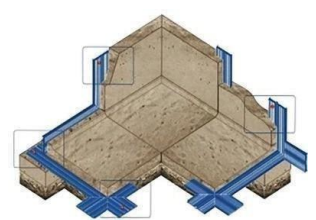
INTERNAL EXPANSION JOINT PVC WATERSTOP



EXTERNAL CONSTRUCTION JOINT PVC WATERSTOP



EXTERNAL EXPANSION JOINT PVC WATERSTOP



## APPLICATION OF PVC WATERSTOP



1. Internal Construction Joint PVC Waterstop
2. Internal Expansion Joint PVC Waterstop
3. Bentonite Hyperstop



1. External Construction Joint PVC Waterstop
2. External Expansion Joint PVC Waterstop



1. Internal Construction Joint PVC Waterstop
2. External Construction Joint PVC Waterstop
3. Bentonite Hyperstop
4. External Expansion Joint PVC Waterstop
5. External Expansion Joint PVC Waterstop

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# BITUSTOP PVC WATERSTOP

PVC Waterstops are extruded from high-grade PVC compounds, designed for sealing movement and construction joints in reinforced concrete structures in blue colour

## CONSTRUCTION JOINT AND DEFORMATION JOINT APPLICATION OF PVC WATERSTOP



BUILT-IN EXPANSION JOINT PVC WATERSTOP



EXTERNAL ATTACHED TYPE EXPANSION JOINT PVC WATERSTOP



BUILT-IN AND EXTERNAL ATTACHED TYPE EXPANSION JOINT PVC WATERSTOP

## CONSTRUCTION JOINT APPLICATION OF PVC WATERSTOP



EXTERNAL ATTACHED TYPE BUILDING JOINT PVC WATERSTOP



BUILT-IN BUILDING JOINT PVC WATERSTOP



BUILT-IN AND EXTERNAL ATTACHED TYPE BUILDING JOINT PVC WATERSTOP

## APPLICATION OF PVC SEALING ROD



EXTERNAL ATTACHED TYPE BUILDING JOINT PVC SEALING ROD



BUILT-IN BUILDING JOINT PVC SEALING ROD



BUILT-IN AND EXTERNAL ATTACHED TYPE BUILDING JOINT PVC SEALING ROD

## PROJECT CASES



INSTALLATION OF EXTERNAL WATERSTOP



INSTALLATION OF EXTERNAL WATERSTOP



CONNECTION METHOD OF WATERSTOP PLANE 90° ROLL LINE



INSTALLATION OF BUILT-IN WATERSTOP

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# BITUSTOP PVC WATERSTOP

PVC Waterstops are extruded from high-grade PVC compounds, designed for sealing movement and construction joints in reinforced concrete structures in blue colour

## HEALTH, SAFETY AND ENVIRONMENT

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Read, understand and follow all Material Safety Data Sheets and product label information for this product prior to use.

### STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.

### TECHNICAL SUPPORT

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NATIONAL ROOFING  
CONTRACTORS ASSOCIATION  
**MEMBER**

# ROOFCRYL

Acrylic Protective Coating

## DESCRIPTION

Roofcrl is a single component water based 100% acrylic smooth waterproof coating.

## ADVANTAGES

- 100% acrylic to protect and waterproof commercial and residential buildings
- Breathable to allow water vapor to escape
- Excellent adhesion, bonds securely to concrete and metal substrate for long-term durability
- Low VOC content for broad compliance across all regions
- Water repellent.
- Highly UV resistance.
- Highly resistance to chlorine and CO2 gas.
- Easy to apply and dries quickly.
- Penetration into concrete is very well.
- Highly resistance to chemicals.
- Excellently adhered on concrete and metal.
- Requires no lining.



## APPLICATION

- Once the mixing is ready apply a two-coat system, achieving a total dry-film thickness (DFT) (0.3-0.4 mm).
- Apply Roofcrl by brush, spray, roller, or spray-and-backroll.

### Roller

- Use a quality ¾ - 1 ¼ nap roller cover.
- Completely saturate the roller and keep it loaded with the coating to build the required miles. Never dry roll.
- Cross roll, maintaining a wet edge, to achieve uniform thickness. Backroll in one direction for consistent appearance.

### Brush

- Application by brush is recommended only for small inaccessible areas, (e.g., on touch-ups.)
- Use only a nylon brush.

## Technical Data

PROPERTIES	RESULTS	TEST METHOD
Density, lbs/gal (kg/L)	11.3–12.3 (1.35–1.47)	ASTM D 1475
Viscosity	40% 102-103	ASTM D 562
Solids, % By weight By volume	60 40	ASTM D 5201
Gloss	3.0	ASTM D 523
Light reflectance, %	> 91	ASTM E 1347
Resistance to wind-driven rain	Meets requirement – no water penetration	TT-C-555B
Flexibility 1" mandrel	No cracking	ASTM D 522
Impact resistance, in-lbs Direct Reverse	82 78	ASTM D 2794
Fungus resistance	No growth; meets requirement	ASTM D 3273
Adhesion on concrete Adhesion on steel	6.5 N/mm <sup>2</sup> 6.3 N/mm <sup>2</sup>	-
CO <sub>2</sub> Diffusion Strength	High	-
Chloride ion coefficient	NO chloride ion diffusion was observed. After 130 days of plunging	-
Freezing / Thawing	No effect was observed	-
Dry Time at 20° C	25 minutes	-

## SURFACE PREPARATION

- Surfaces should be clean and sound and free of all bond-inhibiting contaminants.
- Concrete substrates should be fully cured.
- Repair any holes, spalled and damaged concrete with appropriate repair materials. Allow appropriate cure time prior to coating.
- Remove any protruding concrete accessories and smooth out any surface irregularities.

The information given in this data sheets is the average of test of various samples conducted under lab conditions. \*In accordance to ASTM and UEA/Ce Standards results are subjected to 5 to 20% tolerance.

# ROOFCRYL

Acrylic Protective Coating

## DRYING TIME

Times assume (21 ° C) and 50% relative humidity.

- To touch: 1-2 hours
- To recoat: minimum of 6 hours

Lower surface or air temperatures and higher relative humidity will extend the drying time.

## PRE-CAUTION

- Do not apply when substrate or ambient temperature is (4° C) or below or is expected to fall below (4° C) within 24 hours after application.
- Do not apply if rain is expected within 24 hours of application.

## MIXING

Prior to use, mix Roofcryl at slow speed with drill and mixing paddle to ensure uniform color and to minimize air entrapment.

## TOOL CLEANING

Clean all tools immediately with clean water.



# HEALTH, SAFETY AND ENVIRONMENT

All safety measures should be observed during application. Fire extinguishers should be available on site. Care should be taken with gas, and torches should not be rested on finished surface or on any materials that can be scratched by flame or hot torch. Gloves and goggles should be worn by all workers during application.

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## TECHNICAL SUPPORT

International Insulation Company (IIC) - Bitugulf technical support team consist of expert engineers offers a comprehensive service support to specifiers, end users and contractors, and on-site technical assistance.

## PACKAGING

18-kg. per pail, white color.

## STORAGE

- Keep the products packed in a dry place.
- Keep away from direct sunlight.
- Do not place the pallets on top of each other.
- Rolls must always be kept in a vertical position.

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**Note:** The technical data provided reflects typical properties based on laboratory tests and practical experience, subject to UEAtc tolerance levels. While we cannot guarantee performance under all conditions, further details are available upon request, with a standard variation of up to 20%.



NATIONAL ROOFING  
CONTRACTORS ASSOCIATION  
**MEMBER**

# CATIONIC EMULSION®

(CRS, CMS & CSS)  
Rapid, Medium & Slow Setting Cationic Emulsions

## DESCRIPTION

Rapid, Medium & slow setting, cationic Emulsified Asphalts for use in the construction and maintenance of pavement.

## USES

CRS grades are typically used for tack coat and sealcoat. CMS grades are used for cold mix, crack treatment and tack coat. CSS grades are typically used in slurry seal applications. These grades are used in the construction and maintenance of the pavements as designated in ASTM D 2397.

## FEATURES

- CRS grades are ideal for tack coat layer
- CMS Grades are ideal for cold mix and crack treatment.
- CSS grades are ideal for Slurry seal, tack coat, prime coat and fog seal.
- Nonflammable
- Easy to apply since the product is emulsified and can be used without heating.
- Conforms to ASTM D 2397

## INSTRUCTION FOR APPLICATION

**Surface Preparation** : the area to be sealed and must be dried. It must be swept with a power broom to remove dirt, sand, gravel and other debris.

**Application** : Apply the asphalt emulsion to the clean surface with the distributor spray bar. application temperature should be between 20 to 60 deg, CRS grades should not be diluted with water. CMS and CSS grades can be diluted with water, if needed, for example in fog seal application. However, water should be added slowly to the emulsion.

Diluting emulsion by adding it to a tank of water should never be done. Traffic must be controlled according to a traffic control plan and kept off the sealed area until the emulsion breaks or until it does not adhere to vehicle tire. More details about application are available upon request.

## CLEANING

Emulsions can be removed from equipment and tools with water when they're wet. When dried, it can be removed by any suitable solvent such as gasoline or kerosene.

## COVERAGE

Depends on the surface treatment technique selected.

## HEALTH & SAFETY

Workers should Wear protective masks, Gloves and goggles during application.

## PRECAUTIONS

No special precautions are needed since these are water-based, nonflammable materials.

## PACKING

Supplied in bulk, 180 kg Drums, 15 kg pails. Other weights are available upon request.

## STORAGE

Store in a dry and shaded area in original packing.



The information given in this data sheets is the average of test of various samples conducted under lab conditions.  
\*In accordance to ASTM and UEATc Standards results are subjected to 5 to 20% tolerance.

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## TECHNICAL DATA

Properties	CRS		CMS		CSS		De
	Min	Max	Min	Max	Min	Max	
Saybolt Furol Viscosity of 25 deg C	-	-	-	-	20	100	ASTM D 244, D88
Saybolt Furol Viscosity of 50 deg C	20	100	50	450	-	-	ASTM D 244, D88
Storage stability test, 24 Hrs, %	-	1	-	1	-	1	ASTM D 244
Classification Test	PASS		PASS				ASTM D 244
Coating Ability and Water Resistance	-	-	GOOD	GOOD	-	-	ASTM D 244
Partial charge test	POSITIVE		POSITIVE		POSITIVE		ASTM D 244
Cement Mixing test, %	-	-	-	-	-	2.0	ASTM D 244
Sieve test, %	-	0.1	-	0.1	-	0.1	ASTM D 244
Oil Distillation, Distillate bgy Volume of Emulsion, %	-	3	-	12	-	-	ASTM D 244
Residue by Distillation, %	60	-	65	-	57	-	ASTM D 244
Test on residue from Distillation							
Penetration at 25 deg C, 0.1mm	100	250	40	90	40	90	ASTM D 5, ASTM D 113, ASTM D 2042
Ductility at 25 DegC, Cm	40	-	40	-	40	-	
Solunility in trichloroethylene, %	97.5	-	97.5	-	97.5	-	

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# CUTBACK BITUMEN MC-70

Liquid Bitumen

## DESCRIPTION

**Cutback Bitumen (Liquid Bitumen)** is a mixture of petroleum solvent & bitumen. Typical solvents include naphtha (gasoline) and kerosene. The type of solvent controls the curing time and its ultimate strength.

Solvent is added to reduce the viscosity of the bitumen temporarily so that it can penetrate pavements more effectively or to allow spraying at temperatures that are cold for successful sprayed sealing. The solvent will evaporate after the spraying to leave the remaining material similar in hardness to that of the original bitumen.

## FEATURES

- Cutbacks have higher residual bitumen percentage than emulsions, typically over 80 percent compares with 65 percentages for bitumen emulsion.
- Higher Bitumen cement left on the roadway after curing, for the same volume of binder applied.

## APPLICATION

**Bitumen Cutback** is used for a wide range of application which includes the following:

- **Priming & Seal Coat** - Cutback bitumen's suitable for priming are also used for seal coats, which is applied to an underlying surface to help with adhesion of subsequent asphalt layer. A typical rate of application between 0.2 to 0.4 litres/sq. m.
- **Primer sealing** - Where the temperatures are too cool for an effective priming, or where traffic is likely to upset a primed surface before the final seal sprayed, a primer seal can be used to give adequate protection of the pavement for periods up to 6 - 12 months.

Properties	VALUES	STANDARD
	MC-70	
	Min./Max	
Kinematic viscosity @ 60°C (mm <sup>2</sup> /s) ( cSt)	70/140	ASTM D-445
Flash point (TOC) (°C)	Min.38	ASTM D-3143
<b>Distillate:</b> Distillate, Volume percentage of total distillate to 360°C PASS		
to 225°C	25 - 60	ASTM D-402
to 260°C	20 - 83	ASTM D-402
to 316°C	65 - 95	ASTM D-402
Residue from distillation to 360°C, percentage volume by diff.	55	ASTM D-402
<b>Test on residue from distillation:</b>		
Penetration @ 25°C, 100g, 5s	120 - 130	ASTM D-5
Ductility @25°C, cm/minute	Min 100	ASTM D-113
Solubility in Trichloroethylene, %	99	ASTM D-2042
Water content, % volume	Max 0.20	ASTM D-95

**#Cutback bitumen MC-70 conforms to the requirements of ASTMD-2027/ASTMD-2027M-13.**

Cutback bitumen's suitable for primer sealing can also be used in the manufacture of Pre- mix asphalt, which is used in patch repairs.

- Sprayed sealing- Cutback bitumen's are used extensively in spray sealing applications, particularly in cooler weather where they improved initial stone retention due to their low viscosity.

# CUTBACK BITUMEN MC-70

Liquid Bitumen

## SUPPLY

Steel drums (palletized) Bulk tankers

## CLEANING

Tools: Clean with Kerosene

Hand: Use a hand cleanser or kerosene followed by soap and water.

## TECHNICAL SUPPORT

International Insulation Company (IIC) - Bitugulf technical support team consist of expert engineers offers a comprehensive service support to specifiers, end users and contractors, and on-site technical assistance.

# HEALTH, SAFETY AND ENVIRONMENT

- Always wear suitable personal equipment (PPE). Full skin protection is required to avoid accidental burns when transferring or handling bitumen.
- Always prevent contact between water and hot bitumen by checking the contents of the previous load before loading bituminous products into bulk tankers and by strictly follow the procedures to avoid frothing and boil over of tanks.
- Avoid exposure to fumes by standing back on the gantry or up wing until the vapours have dispersed.
- Minimise bitumen fumes by heating bitumen and asphalt products to the recommended temperatures.
- Minimise the use of diesel when cleaning equipment as this contributes to the bitumen fume. Cutbacks are sometimes used at a temperature above their flash point, so care must be taken regarding the products' flammability. Ensure personnel are well trained in the correct handling & safety procedures.

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