



BUREAU VERITAS

BRANCHE BATIMENT
CIVIL ENGINEERING DIV.

CONTROL REPORT

Visit of 18.04.1996

Date: 18.04.1996

Report n° 01/BLE/1996

Page n° 1/3

SUBJECT	BV.ITA. 75.96.1139 n° B7063 / GZ	Supply description: WATERPROOFING MEMBRANE Containing elastomeric-bitumen
Copy to: BV/MLN - CED-DIV.	Society's Name and Address INDEX S.p.A. Via Rossini, 22 37060 - Castel d' Azzano, Verona (Italy)	
Control description - Methods and remarks		

The undersigned Guido Zoppolato, Surveyor of Bureau Veritas at Bologna Inspection center, acting within the scope of the general condition of the Civil Engineering Branch of Bureau Veritas and upon request

of Messrs. **INDEX S.p.A. - Castel D'Azzano - (VR) - Italy,**

By Order N° Uff. R & S. Dated 18.04.1996

certifies:

that did attend on 18.04.1996 at INDEX S.p.A. workshop - Castel D'Azzano (VR) Italy, the inspections and tests as required by the a.m. Order on the following INDEX S.p.A. waterproofing membrane product:

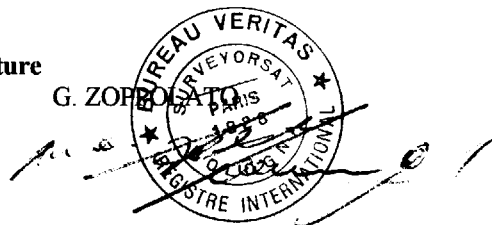
☞ **FIDIA POLIESTERE 4 mm**

☞ **MINERAL FIDIA POLIESTERE 4**

Made at BOLOGNA on 18.04.1996

Signature

G. ZOPPOLATO



Particular mentions

FOR DETAILS OF VISIT SEE PAGE 2 of 2

**Number of enclosures
for information**

INDEX S.p.A. Certificate Dated 18.04.1996

**TESTS CARRIED OUT:****PRODUCT:****MINERAL FIDIA POLIESTERE**

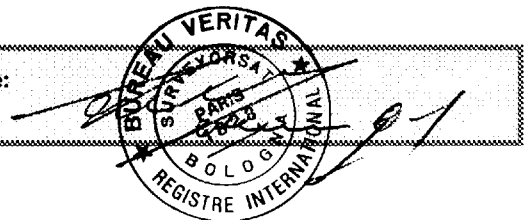
TESTS		NOMINAL VAL.	TOLERANCE	RESULT
Roll length	m	10	± 1%	10,01
Roll width	cm	100	± 1%	100,0
Weight/m ²	g	4000	± 10%	3976
Bending	°C	-5°	≤ - 5°C	OK
Heat resistance	°C	+ 120°	≥ + 120°C	OK
Tensile strength				
Long.	N/5cm	800	± 20%	930
Tranv.	N/5cm	650	± 20%	645
Elongation				
Long.	%	45	± 15	45,9
Tranv.	%	50	± 15	51,1
Nail tearing strength				
Long.	N	150	≥ Nominal Value	161
Tranv.	N	150	≥ Nominal Value	168

Note:

All the above mentioned tests have been performed in our presence on specimens drawn-up from roll identified with N° 436835 O.

Inspector name: Guido ZOPPOLATO

Signature:



**PRODUCT:***FIDIA POLIESTERE 4 mm*

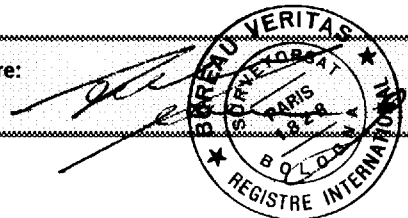
TESTS		NOMINAL VAL.	TOLERANCE	RESULT
Roll length	m	10	± 1%	10,04
Roll width	cm	100	± 1%	100,4
Thickness	mm	4	± 5%	4,07
Weight/m2	g	4400	± 10%	4357
Bending	°C	-5°	≤ - 5°C	OK
Heat resistance	°C	+ 120°	≥ + 120°C	OK
Tensile strength				
Long.	N/5cm	800	± 20%	912
Tranv.	N/5cm	650	± 20%	702
Elongation				
Long.	%	45	± 15	43,0
Tranv.	%	50	± 15	41,9
Nail tearing strength				
Long.	N	150	≥ Nominal Value	201
Tranv.	N	150	≥ Nominal Value	184

Note:

All the above mentioned tests have been performed in our presence on specimens drawn-up from roll identified with N° 441257 O.

Inspector name: Guido ZOPPOLATO

Signature:



DATE :

15 . APR . 96

PRODUCT : FIDIA E MINERAL FIDIA

CHARACTERISTIC		NOMINAL VALUE	TOLLERANCE	TEST METHOD	FREQUENCY
WEIGHT ROLL (MINERAL)		3.5 - 4 - 4.5 Kg / m ²	± 15 %	UEAtc	1 / 5.000 m ² or 1 / Delivery
WEIGHT ROLL (TALC)		3.3 - 4.4 - 5.5 Kg / m ²	± 15 %	UEAtc	1 / 5.000 m ² or 1 / Delivery
THICKNESS (TALC TYPE)		3 - 4 - 5 mm	± 5 %	UEAtc	1 / 5.000 m ² or 1 / Delivery
LENGTH ROLL		10 m	± 1 %	UEAtc	Tested During Production
WIDTH ROLL		100 cm	± 1 %	UEAtc	1 / 5.000 m ² or 1 / Delivery
LOW TEMPERATURE FLEXIBILITY		@ - 5 °C	OK ≤ -5°C	UEAtc	1 / 5.000 m ² or 1 / Delivery
HEAT RESISTANCE		@ 120 °C	OK ≥ 120°C	UEAtc	1 / 5.000 m ² or 1 / Delivery
TENSILE STRENGTH	L	800 N / 5 cm	± 20 %	UEAtc	1 / Lot of Reinforcement
	T	650 N / 5 cm	± 20 %		
ELONGATION AT BREAK	L	45 %	± 15% Abs.Value	UEAtc	1 / Lot of Reinforcement
	T	50 %	± 15% Abs.Value		
NAIL TEARING STRENGTH	L	150 N	≥ Nominal Value	UEAtc	1 / Month
	T	150 N	≥ Nominal Value		
DIMENSIONAL STABILITY	L	≤ -0.5 %	≤ Nominal Value	UNI 8202	1 / Month
	T	≤ 0.5 %	≤ Nominal Value		
PEN @ 25 °C BITUMEN		80 + 130 dmm	OK 80 + 130 dmm	ASTM D 5	1 / Delivery
PEN @ 60 °C COMPOUND		70 + 110 dmm	OK 70 + 110 dmm	ASTM D 5	1 / 5.000 m ² or 1 / Delivery
HOMOGENEITY		---	---	INDEX	1 / 5.000 m ² or 1 / Delivery
PEN @ 60 °C APP		80 + 150 dmm	OK 80 + 150 dmm	ASTM D 5	1 / Lot
WEIGHT OF SLATES / m ²		900 gr / m ²	± 15 %	UEAtc	1 / 5.000 m ² or 1 / Delivery

RAW MATERIALS

SLATES

POWDER CONTENTS	≤ 2 %	OK ≤ 2 %	INDEX	1 / Lot
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REINFORCEMENT POLYESTER

WEIGHT / m ²		170 g / m ²	± 15 %	UEAtc	1 / Lot
TENSILE STRENGTH	L	600 N / 5 cm	± 20 %	UEAtc	1 / Lot
	T	400 N / 5 cm	± 20 %		
ELONGATION AT BREA	L	30 %	± 15% Abs.Value	UEAtc	1 / Lot
	T	40 %	± 15% Abs.Value		

COMPOUND PROPERTY

RING & BALL (Taken from impregnation bath)		145 °C	≥ 140 °C	ASTM	1 / 5.000 m ² or 1 / Delivery
LOW TEMPERATURE FLEXIBILITY		@ - 5 °C	OK ≤ -5 °C	UEAtc	1 / Mounth

Fidia s.a.

PRODUCT : ROBUR BIARMATO

CHARACTERISTIC		NOMINAL VALUE	TOLLERANCE	TEST METHOD	FREQUENCY
WEIGHT ROLL		4.4 - 5.5 Kg / m ²	± 15 %	UEAtc	1 / 5.000 m ² or 1 / Delivery
THICKNESS		4 - 5 mm	± 5 %	UEAtc	1 / 5.000 m ² or 1 / Delivery
LENGTH ROLL		10 m	± 1 %	UEAtc	Tested During Production
WIDTH ROLL		100 cm	± 1 %	UEAtc	1 / 5.000 m ² or 1 / Delivery
LOW TEMPERATURE FLEXIBILITY		@ - 5 °C	OK ≤ -5°C	UEAtc	1 / 5.000 m ² or 1 / Delivery
HEAT RESISTANCE		@ 120 °C	OK ≥ 120°C	UEAtc	1 / 5.000 m ² or 1 / Delivery
TENSILE STRENGTH	L	500 N / 5 cm	± 20 %	UEAtc	1 / Lot of Reinforcement
	T	400 N / 5 cm	± 20 %		
ELONGATION AT BREAK	L	50 %	± 15% Abs.Value	UEAtc	1 / Lot of Reinforcement
	T	50 %	± 15% Abs.Value		
NAIL TEARING STRENGTH	L	150 N	≥ Nominal Value	UEAtc	1 / Month
	T	150 N	≥ Nominal Value		
DIMENSIONAL STABILITY	L	≤ -0.2 %	≤ Nominal Value	UNI 8202	1 / Month
	T	≤ 0.2 %	≤ Nominal Value		
PEN @ 25 °C BITUMEN		80 + 130 dmm	OK 80 + 130 dmm	ASTM D 5	1 / Delivery
PEN @ 60 °C COMPOUND		70 + 110 dmm	OK 70 + 110 dmm	ASTM D 5	1 / 5.000 m ² or 1 / Delivery
HOMOGENEITY		---	---	INDEX	1 / 5.000 m ² or 1 / Delivery
PEN @ 60 °C APP		80 + 150 dmm	OK 80 + 150 dmm	ASTM D 5	1 / Lot
RAW MATERIALS					
REINFORCEMENT FIBER GLASS					
WEIGHT / m ²		50 g / m ²	± 15 %	UEAtc	1 / Lot
TENSILE STRENGTH	L	150 N / 5 cm	± 15 %	UEAtc	1 / Lot
	T	100 N / 5 cm	± 15 %		
ELONGATION AT BREAK	L	1.5 %	≥ Nominal Value	UEAtc	1 / Lot
	T	1.5 %	≥ Nominal Value		
REINFORCEMENT POLYESTER					
WEIGHT / m ²		120 g / m ²	± 15 %	UEAtc	1 / Lot
TENSILE STRENGTH	L	300 N / 5 cm	± 20 %	UEAtc	1 / Lot
	T	250 N / 5 cm	± 20 %		
ELONGATION AT BREAK	L	50 %	± 15% Abs.Value	UEAtc	1 / Lot
	T	55 %	± 15% Abs.Value		
COMPOUND PROPERTY					
RING & BALL (Taken from impregnation bath)		145 °C	≥ 140 °C	ASTM	1 / 5.000 m ² or 1 / Delivery
LOW TEMPERATURE FLEXIBILITY		@ - 5 °C	OK ≤ -5 °C	UEAtc	1 / Month