



**BUREAU
VERITAS**

**BRANCHE BATIMENT
CIVIL ENGINEERING DIV.**

CONTROL REPORT

VISIT OF : 8 Sept 1998

il 8 Sept 1998

Report n° 1/98

Page n° 1/2

SUBJECT

Technical control of samples taken from warehouse of Index S.P.A.

BV.ITA. 40.98.1376

n° B 5213/ SB

Supply description

Waterproofing membrane based on bitumen modified with polymers.

Copy to:

Society's Name and Address

INDEX S.p.A. Via Rossini,22
37060 - Castel d' Azzano, (VR)

Control descriptions - Methods and remarks.

The undersigned Sandro BRUSEGAN, Surveyor of Bureau Veritas at Bologna Inspection centre, acting within the scope of the general condition of the Civil Engineering Branch of Bureau Veritas and upon request of:

INDEX S.p.A. Via Rossini,22 - 37060 - Castel d' Azzano, (VR)

by order N° Uff. R. & S. del 04.09.1998

certifies:

that did attend on 08/09/98 at INDEX S.p.A. Via Rossini,22 - 37060 - Castel d' Azzano, (VR) Italy, the inspections and tests as required by the a.m. Order on the following Index S.p.A. waterproofing product::

⇒ **MINERAL TESTUDO POLIESTERE 4.5**

Details of all the tests are enclosed with this report..

We declare also that all the test performed on the material has been done in conformity with UEAtc tests procedures.

Bologna, 8 Sept 1998
Signature Mr. Sandro BRUSEGAN





TEST CARRIED OUT:

PRODUCT:

MINERAL TESTUDO POLIESTERE 4.5 KG

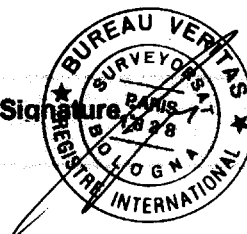
TESTS		NOMINAL VALUE	TOLLERANCE	RESULTS
Weight for unit area	g/m ²	4500	± 10 %	4609
Roll length	m	10	± 1 %	10.03
Roll width	cm	100	± 1 %	100.5
Flexibility at low temp.	°C	-15°C	≤ Nom. Value	OK -15°C
Heat resistance	°C	120°C	≥ Nom. Value	OK 120°C
Tensile strength				
Long / Transv	N / 5cm	500 / 350	± 20 %	854 / 644
Elongation at break				
Long / Transv	%	45 / 55	± 15 % val ass	40.3 / 54.1
Nail Tear resistance				
Long / Transv	N	120 / 120	≥ Nom. Value	155.0 / 172.7
Tensile strength of joints				
Long / transv	N / 5cm	>500 or break must occurs out of the joints.		823 / 617

Note:

All the above mentioned tests have been performed in our presence on specimens drawn-up from roll identified with controll number V - 343382.

Inspector name : Sig. Sandro BRUSEGAN

Signature



Index S.p.A.
 Lab. Ricerca e Sviluppo
 I e II Div.

Giunti piani UEAtc (200 mm/min)

Tipo di prova: Trazione
 Operatore: Operator
 Identif. lotto: BVER85
 Interfaccia: 5500

Instron Corporation
 Series IX Automated Materials Testing System 7.43.00
 Data test: martedì, settembre 08, 1998

Vel. di camp. (pt/s): 10.0000
 Vel. trasversa: 200.0000mm/min
 2a vel trasversa: 0.0000 mm/min
 Campo car f. scale: 5.000 kN

Umidità (%): 50
 Temperatura: 23 C

Campione Min Testudo 4.5

Commenti lotto:

	Car. al Picco (daN)	Car. a Rott. Autom (daN)
1	77.860	77.486
2	80.706	27.673
3	89.249	89.249
4	76.720	76.720
5	83.984	82.911
6	85.618	85.618
7	64.755	64.755
8	59.443	59.443
9	55.311	34.445
10	67.781	67.781
11	65.186	65.186
12	57.893	57.893
Media	72.042	65.763
D.S.	11.720	19.156



Lab. Ricerca e Sviluppo
I II e III Divisione
INDEX S.p.A.

Prove di carico UNI 8202

Tipo di prova: Trazione
Operatore: Operator
Identif. lotto: BVER83
Interfaccia: 5500

Instron Corporation
Series IX Automated Materials Testing System 7.43.00
Data test: martedì, settembre 08, 1998

Vel. di camp. (pt/s): 10.0000
Vel. traversa: 100.0000mm/min
2a vel traversa: 0.0000 mm/min
Campo car f. scala: 5.000 kN

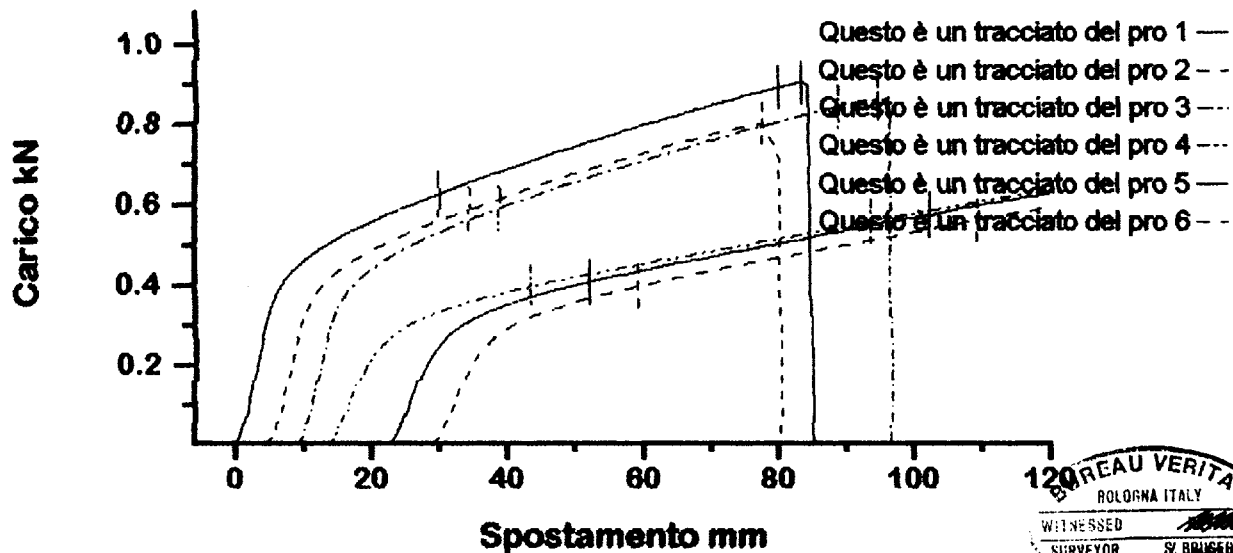
Umidità (%): 50
Temperatura: 23 C

Campione Mineral Testudo 4.5

Commenti lotto:

	Car. al Picco (N)	Def.ne% al Picco (%)	Car. a Rott. Autom (N)	Def.ne% a Rott. Autom (%)	Car. al 15% allung (daN)	Car. al 40 % allung. (daN)
1	902.109	41.667	902.109	41.667	62.704	89.193
2	799.585	36.500	799.585	36.500	58.778	-
3	861.253	42.917	861.253	42.917	59.036	84.342
4	643.502	55.083	643.502	55.083	39.616	55.756
5	677.583	58.083	677.583	58.083	40.812	57.398
6	611.690	49.167	611.690	49.167	39.682	55.952
Media	749.287	47.236	749.287	47.236	50.105	0
D.S.	121.397	8.342	121.397	8.342	11.124	0

ID lotto: BVER83



120 REAU VERITAS
BOLOGNA ITALY
WITNESSED
SURVEYOR
DATE 08/09/98

Lab. Ricerche e Sviluppo
 I II e III Divisione
 INDEX S.p.A

Lacerazioni UNI 8202 (al chiodo)

Tipo di prova: Trazione
 Operatore: Operator
 Identif. lotto: -
 Interfaccia: 5500

Instron Corporation
 Series IX Automated Materials Testing System 7.43.00
 Data test: martedì, settembre 08, 1998

Vel. di camp. (pt/s): 10.0000
 Vel. trasversa: 100.0000mm/min
 2a vel trasversa: 0.0000 mm/min
 Campo car f. scala: 5.000 kN

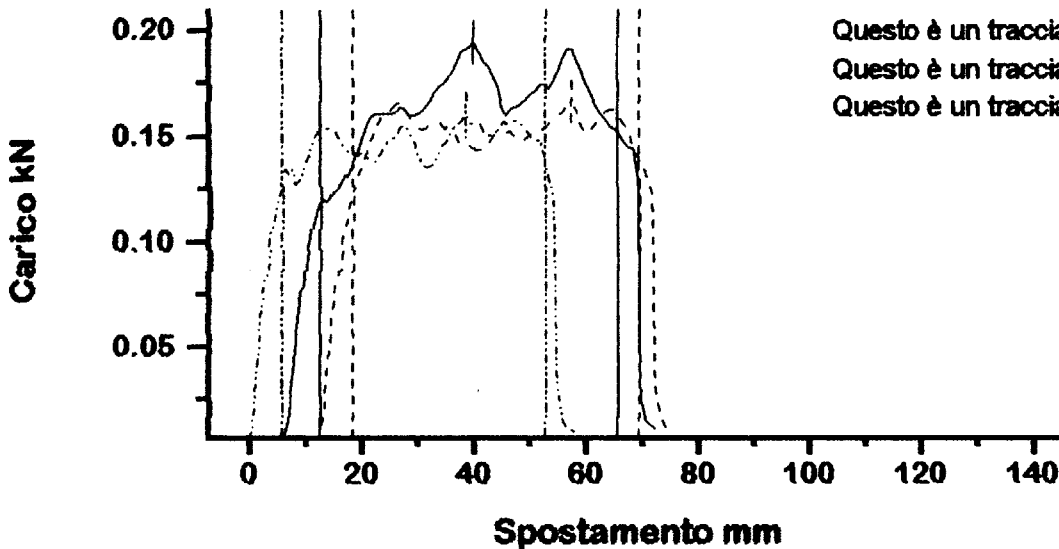
Umidità (%): 50
 Temperatura: 23 C

Campione Mineral Testudo 4.5

Commenti lotto:

	Car.Md tra Limiti l (N)	Car. al Picco (N)
1	74.832	174.213
2	128.561	147.792
3	122.837	144.345
4	147.050	159.907
5	165.142	194.092
6	153.118	165.893
Media	131.923	164.374
D.S.	32.046	18.321

ID lotto: -



Questo è un tracciato del pro 4 ---
 Questo è un tracciato del pro 5 —
 Questo è un tracciato del pro 6 - -

