TEXTAFORME (2002)

DOUBLURE DE COFFRAGE / FORMWORK LINER

(Technical Specifications)

Norm M.T.Q. No.31001

ACT for the Environment

- ***Made of natural fiber***
- ***Reduction of CO2***
- ***Sustainable construction***

FORMWORK LINER

- **AESTHETIC**
- **DURABLE**
- **RELIABLE**

TEXTAFORME

AESTHETIC – DURABLE – RELIABLE

Description

Textaforme is a product tested by the M.T.Q since 2002. The product standard is 80m² minimum per roll. The variable width (based on natural cotton) is (178 CM) 70 inches +- 3%. The length is variable by 50 yards or more with a minimum tolerance of 2%, but will never be less than 80m² per roll. ***Note:*** most rolls exceed the minimum, up to plus 8-10%. For a total of 80m². Each roll is packaged separately. The TEXTAFORME formwork lining can be used, front or back, and can only be used once.

Use (installation)

Textaforme is a simple product that's easy to install. It can be used according to two methods. For wood formwork it can be attached using staples or adhesive glue such as 3M Super 77 Industrial Grade, strongly recommended, or its equivalent. For steel formwork, it can be attached using an adhesive such as 3M 77 Industrial Grade, strongly recommended or its equivalent.

NOTE: **SCRAPE ALL DEBRIS FROM THE SURFACE PRIOR TO INSTALLATION AND MAKE SURE IT IS CLEAN AND FREE FROM ALL SUBSTANCES SUCH AS FORMWORK OIL. THE LINER MUST BE HELD TAUGHT TO PREVENT CREASING WHEN CONCRETE IS POURED.**

REMARK: USAGE OF SELF-LEVELING CONCRETE : As a standard, this type of concrete doesn't need to be vibrated. The main characteristic of the formwork liner is absorption. Therefore, when the concrete vibrates, it absorbs the water or laitance of the concrete, this standardizes the concrete surface by eliminating bubbling. For this, the use of the self-leveling concrete (which will not be vibrated) can result in a less appropriate finish at every end of the pour or on the surface of the concrete.

Concrete pouring

Prevent splashing on prepared liner to maintain the desired aesthetic appearance.

Curing

TEXTAFORME can be also used as a liner for water-cured concrete. Water curing must be carried out according to instructions provided by the engineer or project representative. DO NOT APPLY CHEMICAL PRODUCTS TO THE LINER.

Protection

If necessary, protect the liner from bad weather following installation.

During cold weather, the installed formwork liner must be maintained in an environment where the temperature is above 2 °C.

The formwork liner must not be soaked with water before pouring concrete.

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The following characteristics were compared:

a) hardness of the surface tested by sclerometer (ASTM C 805)
b) surface bubbling measured by an image analyzer
c) direct traction resistance (CAN//CSA A2.2 -6B)
d) resistance to peeling (ASTM C672)
e) sealed against chloride ions (ASTM C1202)
f) resistance from penetration by chloride ions (AASHTO T259)

The results obtained were:

Test	Surface without liner	Surface with TEXTAFORME liner
Hardness of surface by rebound measured by Schmidt hammer. Average of 20 readings.	30.4	31.8
Surface bubbling in terms of percentage of total surface.	1.0	0.0
Direct traction resistance in Mpa. We note that beaks always occurred directly behind the cased surfaces (average 2 samples)	2.12	2.19
Resistant to peeling. Loss in kg/m^2 (average 2 samples), 50 cycles.	0	0
Sealed against chloride ions in Coulombs (average 2 samples)	4491	4297
Penetration by chloride ions, in mg/kg (average 2 samples) at a depth of 0 to 12 mm 13 to 25 mm 26 to 28 mm 39 to 51 mm	 8606 2000 280 158	 5790 724 270 214

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Results obtained so far indicate that:

a) the presence of the liner eliminated bubbling.

b) the liner helped significantly reduce penetration by chloride ions.

c) the liner had no effect on the other characteristics that were evaluated.

Conclusions:

Use of the TEXTAFORME liner provides an aesthetic benefit as well as added resistance to penetration by chloride ions.

Laboratory:

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ANALYSIS & PROPERTIES OF TEXTAFORME FORMWORKLINER

THE RESULTS OBTAINED ARE:

Test	Results
Weave	Twill 3/1
Air permeability CAN/CGSB-4.2 No.36-M89	Performed at 125 Pa (0,5"H^2O) Maximum value, $cm^3/cm^2.s^{-1}$:16,0 Minimum value, $cm^3/cm^2.s^{-1}$:11,6 Average, $cm^3/cm^2.s^{-1}$: 13,6 C.V., %: 10,4
Quantitative analysis of fiber mixture CAN/CGSB-4.2 No.14.18-M91	100% cotton
Fabric thickness CAN/CGSB-4.2 No.37-2002	Average, mm: 0,47 C.V., %: 1,8
Mass of fabrics CAN/CGSB-4.2 No. 5.1-M90	Average g/m^2: 217,7 0z/yd^2: 6,4 C.V., %: 0,7
Breaking strength of fabrics Strip Method Constant-time-to-break-Principle CAN/CGSB-4.2 No.9.1-M90	Warp / Weft Average, N: 545,5 / 256,0 Lbf: 122,6 / 57,5 C.V., %: 4,0 / 6,4

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Test	Results		
Tearing strength – Trapezoid Method CAN/CGSB-4.2 No.12.2-95		Warp	Weft
	Average, N:	67,8	27,1
	Lb:	15,3	6,1
	C.V., %:	3,3	5,0
Tearing strength Single-Rip Method CAN/CGSB-4.2 No.12.2-95		Warp	Weft
	Average, N:	36,0	27,6
	Lb:	8,1	6,2
	C.V., %:	5,2	2,3
Water-drainage capacity	Test No.		Flow rate
	1		146mL/m²/s
	2		176mL/m²/s
	Average		161mL/m²/s

NOTE: The formwork liner TEXTAFORME can be used on either sides of the liner.
The formwork liner TEXTAFORME is a single use.