

# Textile Architecture



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**PRECONSTRAINT<sup>®</sup>**  
**1002 · 1202 · 1302 · 1502**  
**METALLIC**

**FERRARI**  
architecture



# Textile Architecture

## PRECONTRAIN<sup>®</sup> 1002-1202-1302-1502 METALLIC

Technical properties	Précontraint <sup>®</sup> 1002 METALLIC	Précontraint <sup>®</sup> 1202 METALLIC	Précontraint <sup>®</sup> 1302 METALLIC	Précontraint <sup>®</sup> 1502 METALLIC	Standards
Yarn	1100 Dtex PES HT	1100 /1670 Dtex PES HT	1100/2200 Dtex PES HT	1670/2200 Dtex PES HT	
Weight	1050 g/m <sup>2</sup> / 31 oz/sqyd	1050 g/m <sup>2</sup> (1250 g/m <sup>2</sup> *) / 31 oz/sqyd	1350 g/m <sup>2</sup> / 40 oz/sqyd	1500 g/m <sup>2</sup> / 44 oz/sqyd	EN ISO 2286-2
Width	180 cm	180 cm	180 cm	180 cm	(-1mm/+1mm)
Tensile strength (warp/weft)	420/400 daN/ 5 cm	560/560 daN/ 5 cm	800/700 daN/ 5 cm	1000/800 daN/ 5 cm	EN ISO 1421
Tear resistance (warp/weft)	55/50 daN	80/65 daN	120/110 daN	160/140 daN	DIN 53.363
Adhesion	12 daN/ 5 cm	12 daN/ 5 cm	13 daN/ 5 cm	15 daN/ 5 cm	EN ISO 2411
Reaction to fire	<b>M2</b> /NF P 92-507 • <b>B1</b> /DIN 4102-1 BS 7837 • <b>M2</b> /UNE 23.727 SITAC/ETA/SIS 650082 <b>VKF 5.2</b> /SN 198898 • <b>Test 2</b> /NFPA 701 CSFM T19 • ASTM E84 <b>Class C</b> /ASTM E 108	<b>B1</b> /DIN 4102-1 • BS 7837 CSFM T 19 • SITAC/SIS 650082 <b>VKF 5.2</b> /SN 198898 <b>Test 2</b> /NFPA 701	<b>B1</b> /DIN 4102-1 • BS 7837 CSFM T 19 • SITAC/SINTEF/SIS 650082 <b>VKF 5.3</b> /SN 198898 <b>Test 2</b> /NFPA 701 <b>B1</b> /ONORM B 3800-1	<b>B1</b> /DIN 4102-1 • BS 7837 SITAC/SINTEF/ETA/SIS 650082 <b>Test 2</b> /NFPA 701 • CSFM T 19	
Surface Treatment	Titanium - based metallic treatment				
The technical data here above are average values with a +/- 5% tolerance.					
<b>Additional informations</b>					
Coating thickness at the top of the yarns	350 µ	270 µ	300 µ	300 µ	
Total thickness	0,78 mm	0,78 mm	1,02 mm	1,14 mm	
Light stability	5/5	5/5	5/5	5/5	EN ISO 115-07
Transmission UV	T-UV 0%	T-UV 0%	T-UV 0%	T-UV 0%	Eppley Solar & Sky U-V radiometer
Global thermal conductivity* Vertical position	U= 5,6W/m2/°C	U= 5,6W/m2/°C	U= 5,6W/m2/°C	U= 5,6W/m2/°C	
Horizontal position	U= 6,4W/m2/°C	U= 6,4W/m2/°C	U= 6,4W/m2/°C	U= 6,4W/m2/°C	
Acoustic of weakening index (+/-1)	Rw: 15 dBA Tolérance +/- 1 dBA	Rw: 15 dBA	Rw: 16 dBA	Rw: 17 dBA	ISO 717
Extreme working temperatures	- 30°C/+ 70°C	- 30°C/+ 70°C	- 30°C/+ 70°C	- 30°C/+ 70°C	In static position
Management quality system				ISO 9001	

\* M2 only available on special order at 1250 g/m<sup>2</sup>

Those data are obtained by calculation through simulations of the average conditions of use, those values must be considered as approximation

The buyer of our products is fully responsible for their application or their transformation concerning any possible third party. The buyer of our products is responsible for their implementation and installation according to the standards, use and customs and safety rules of the countries where they are used. Concerning the contractual warranty, please refer to the text of our warranty.

The values here above mentioned are the results of tests performed in conformity with the use and customs in terms of studies, they are given as an indication in order to allow our customers to make the best use of our products. Our products are subjects to evolutions due to technical progress, we remain entitled to modify the characteristics of our products at any time. The buyer of our products is responsible to check that the here above data are still valid.

### 100% recyclable

Ferrari<sup>®</sup> developed the Taxyloop<sup>®</sup> technology specifically for the recycling of composite PVC membranes and textiles. Through the management of its end-of-life products Ferrari<sup>®</sup> is committed to sustainable development.  
[www.taxyloop.com](http://www.taxyloop.com)

### Sustainable development

Ferrari<sup>®</sup> development is based on strict adherence to good safety and environmental practices, that include an understanding of Life Cycle Analysis (ACV), selection of the best materials, and eco-design. The Company obtained its first ISO 14001 certification in 2003.

### Specification Service

The Ferrari<sup>®</sup> specification service is available to inform you, advise you and suggest innovative solutions for your specific requirements.

To detail your project, fill in a form under:  
[www.ferrari-architecture.com](http://www.ferrari-architecture.com)

# FERRARI



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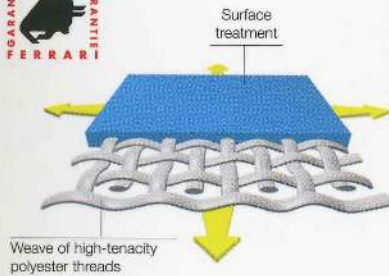
## The Metallic look: long-lasting aesthetics



Desert farm - Dubaï

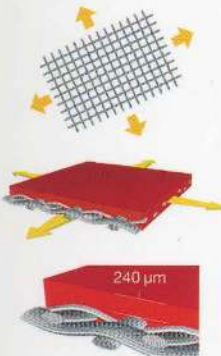
The Metallic range is gold, copper and pearl, giving buildings an air of noble metals while allowing that flowing freedom of shape and lightness so essential to composite textiles. This titanium-based Metallic treatment springs from the automobile industry's coated-particle techniques. With this technology good abrasion resistance is guaranteed for the membrane surfaces, together with colour fastness.

## Exclusive Précontraint Ferrari® technology



Worldwide patented Ferrari® Précontraint technology consists of pre-stressing the textile supports both before and during all the coating operations. Unlike traditional textiles Ferrari® Précontraint membranes are subjected to regular, balanced tension both warpwise and weftwise that results in similar elongation characteristics in both directions.

This gives — very considerable dimensional stability — limited creep over time — longer life — performance homogeneity from batch to batch.



Ferrari® Précontraint textiles respect the weft yarn direction which stays identical from one batch to the other.

Précontraint® textiles have very low crimp, that is similar in both warp and weft direction.

Précontraint® 702



Conventional coated textiles exhibit serious deformation of the weft yarn which in addition very greatly from one batch to the other.

Conventional coated textiles presents a high level a crimp in the weft direction.

Type I classic coated textile

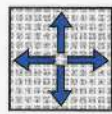
## Technical features **PRECONTRAIT®**

1002-1202-1302-1502

METALLIC



Précontraint  
Ferrari®



Dimensional  
stability



Long life



U.V.  
resistant



Flame  
retardant



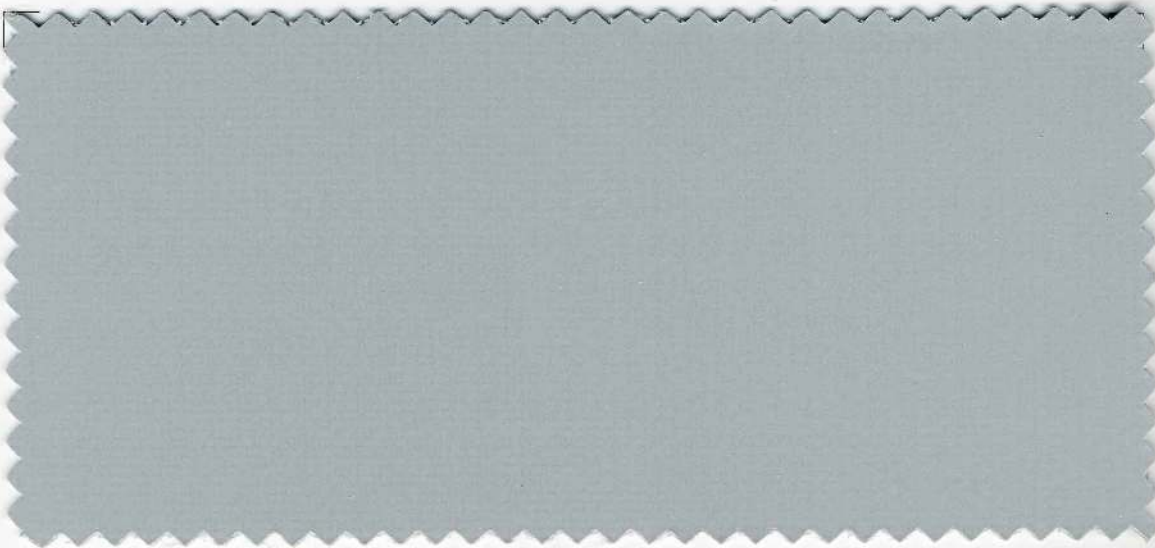
Easy  
maintenance



100% recyclable  
textile



10 years  
guarantee



Colour shade 1313 Metallic Pearl



Colour shade 1276 Metallic Gold



Colour shade 1275 Metallic Copper

Précontraint® 1002 to Précontraint® 1502 can be made on request  
Adjustments necessary to welding data.