MAIN FEATURES

• Creative freedom
• Strength and longevity
• Thermal and solar protection
• Perfect outward visibility
• Wind protection
• Lightweight, durable and 100% recyclable

APPLICATIONS

• Facades in new construction, renovation or extension
• Suitable for all types of buildings (tertiary, cultural, industrial, commercial, sports facilities, etc.)
• Large continuous surfaces or discontinuous panels
• Shading solutions

Soltis and Précontraint are Serge Ferrari registered trademarks.

www.sergeferrari.com

Cover picture: Day nursery (DE)
Architects: (se)arch Architekten gbr, Stuttgart
Inside picture: Musikschule (DE) - apartment building (FR) - school 42 (FR)

Solutech offers a comprehensive solution for externally insulated, ventilated facades through a combination of Soltis FT 381 with Stamisol Color watertight breathable membranes.

Comfort and sustainable development

Soltis FT 381 facade solution acts on:
• building thermal control: inhibits up to 81% of solar heat, depending on colours,
• light control: allows natural light to enter, while protecting against glare,
• reduction of environmental impacts: lightweight and 100% recyclable via Texyloop®.

Expressive material

Soltis FT 381, a source of creativity for asserting or transforming a building’s personality through:
• a palette of 15 colours and pearl or metallic finishes,
• flexibility allowing volumes to be created for 3D effects and light play,
• graphic customization (digital or serigraphic printing).

Boldness and creativity

Guaranteed aesthetic and structural durability

Conserves visual contact with exterior

Technical properties Soltis FT 381 Standards

Front face metallic or pearl finish
Back face matt
Yarn 1100 Dtex PES HT
Weight 550 g/m² EN ISO 2286-2
Thickness 0.95 mm EN ISO 5084
Width 267 cm (-1 mm/+1 mm)

Physical properties

Tensile strength (warp/weft) 330/330 daN/5 cm EN ISO 1421
Tear strength (warp/weft) 65/65 daN EN 1875-3
Adhesion 9 daN/5 cm EN ISO 2411
Porosity 28%
Extreme working temperatures -30°C/+70°C

Comparative analysis depending on end-of-life scenarios

Flame retardancy

Rating

M1/NFP 92-507 • Method 1 et 2/NFPA 701 • Class A/ASTM E84 • CSFM T19 • 1530.3/AS/NZS • Group 1/AS/NZS 3837 • G1/GOST 30244-94 • B1/DIN 4102-1 • BS 7837 • VKF 5.3/SNF 198898

Euroclass

B-s2,d0/EN 13501-1

Management systems

Quality ISO 9001
Certifications, labels, guarantees, recycling

The technical data above are average values with a +/- 5% tolerance, variance of +/- 10% for weight given.

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 in compliance with standards, codes of practice and safety regulations in force in destination countries. To ensure warranty effectiveness, refer to warranty certificate concerned available on demand.

The values quoted above represent results of tests performed in compliance with common design practices and are provided for information only to enable 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 for checking the validity of the above data.

TOOLS AND SERVICES

• LCA available on request
• Document and photo libraries: www.sergeferrari.com

Texyloop® recycling

Incineration Landfill Functional unit = 1 sqm FT

Resource depletion 0.015 0.083 0.082 kg Sb eq
Global warming 1.29 3.66 3.29 kg CO2 eq
Energy Consumption 43.3 80.7 80.7 Megajoules eq.
Water consumption 87 234.5 233.5 Litres

Contact

• Headquarters: +33 (0)4 74 97 41 33
• Your local representative: www.sergeferrari.com

The Serge Ferrari operational recycling chain
Secondary raw materials of high intrinsic value compatible with multiple processes
A quantified response to combat depletion of natural resources
www.texyloop.com
**MAIN FEATURES**
- Creative freedom
- Strength and longevity
- **Thermal and solar protection**
- Perfect outward visibility
- Wind protection
- Lightweight, durable and 100% recyclable

**APPLICATIONS**
- Facades in new construction, renovation or extension
- Suitable for all types of buildings (tertiary, cultural, industrial, commercial, sports facilities, etc.)
- Large continuous surfaces or discontinuous panels
- Shading solutions

---

Expressive material

Soltis FT 381, a source of creativity for asserting or transforming a building’s personality through:
- a palette of 15 colours and pearl or metallic finishes,
- flexibility allowing volumes to be created for 3D effects and light play,
- graphic customization (digital or serigraphic printing).

---

A comprehensive, reliable solution

Soltis FT 381 combines:
- lightness and flexibility,
- long-term resistance to climatic damage (wind, hail, UV),
- long-term dimensional stability.

Serge Ferrari offers a comprehensive solution for externally insulated, ventilated facades through a combination of Soltis FT 381 with Stamisol Color watertight breathable membranes.

---

Comfort and sustainable development

Soltis FT 381 facade solution acts on:
- building thermal control: inhibits up to 81% of solar heat, depending on colours,
- light control: allows natural light to enter, while protecting against glare,
- reduction of environmental impacts: lightweight and 100% recyclable via Texyloop®.
Solar Transmission (%)

Solar Reflection (%)

Solar Absorption (%)

TS + RS + AS = 100% of incident energy

g_{tot}:

External Solar Factor

Type “C” glazing: insulating, slightly emissive double glazing in position 3 (4 + 16 + 4; argon-filled - g=0.59 - U=1.2)

TV n-h:

Normal-hemispherical visible light transmission (%)

Solar and light properties (EN 14501)

<table>
<thead>
<tr>
<th>Reference</th>
<th>TS</th>
<th>RS</th>
<th>AS</th>
<th>TV n-h</th>
<th>g_{tot}</th>
</tr>
</thead>
<tbody>
<tr>
<td>381-3101</td>
<td>38</td>
<td>31</td>
<td>10</td>
<td>28</td>
<td>0.22</td>
</tr>
<tr>
<td>381-3105</td>
<td>29</td>
<td>19</td>
<td>52</td>
<td>29</td>
<td>0.22</td>
</tr>
<tr>
<td>381-3108</td>
<td>27</td>
<td>10</td>
<td>63</td>
<td>27</td>
<td>0.21</td>
</tr>
<tr>
<td>381-3109</td>
<td>28</td>
<td>37</td>
<td>35</td>
<td>28</td>
<td>0.20</td>
</tr>
<tr>
<td>381-3113</td>
<td>27</td>
<td>9</td>
<td>64</td>
<td>27</td>
<td>0.21</td>
</tr>
<tr>
<td>381-3117</td>
<td>27</td>
<td>26</td>
<td>47</td>
<td>27</td>
<td>0.20</td>
</tr>
<tr>
<td>381-3118</td>
<td>28</td>
<td>30</td>
<td>42</td>
<td>28</td>
<td>0.20</td>
</tr>
<tr>
<td>381-3119</td>
<td>30</td>
<td>41</td>
<td>29</td>
<td>29</td>
<td>0.21</td>
</tr>
<tr>
<td>381-3120</td>
<td>28</td>
<td>6</td>
<td>66</td>
<td>28</td>
<td>0.22</td>
</tr>
<tr>
<td>381-3121</td>
<td>28</td>
<td>31</td>
<td>41</td>
<td>28</td>
<td>0.20</td>
</tr>
<tr>
<td>381-3123</td>
<td>29</td>
<td>34</td>
<td>37</td>
<td>28</td>
<td>0.21</td>
</tr>
<tr>
<td>381-3124</td>
<td>28</td>
<td>28</td>
<td>44</td>
<td>27</td>
<td>0.21</td>
</tr>
<tr>
<td>381-3125</td>
<td>27</td>
<td>20</td>
<td>53</td>
<td>28</td>
<td>0.20</td>
</tr>
<tr>
<td>381-3127</td>
<td>27</td>
<td>29</td>
<td>44</td>
<td>28</td>
<td>0.20</td>
</tr>
<tr>
<td>381-3128</td>
<td>28</td>
<td>40</td>
<td>32</td>
<td>27</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Two-way tensioning keeps warp and weft yarns absolutely straight.

Dirt-resistant smooth surface

High tenacity polyester base cloth with UV protection

Patented worldwide, Précontraint Serge Ferrari® technology involves keeping the membrane under tension in both directions throughout the manufacturing cycle.

Benefits:

• No deformation during installation and usage: no re-tensioning required
• Maintains its integrity under external aggression (wind loads, impacts, etc.)
• Long-term strength and aesthetic quality
• Smooth finish, easy upkeep

Characteristics:

• Exceptional dimensional stability
• Long-term strength
• Greater coating thickness at the top of the yarns
• Exceptional flatness

Exclusive Précontraint Serge Ferrari® technology

Soltis FT 381’s ECO Identity profile

RENEWABLE CONTENTS

R: no bio-sourced constituent

HEALTH PRECAUTION

R+1: substance of very high concern (SVHC *)

< 0.1% (substances authorised by REACH but listed by the European agency)

INDOOR AIR QUALITY

R: complies with usage-related legislation

ENVIRONMENTAL FOOTPRINT

R+2: specific assessment of an identified supplier

CIRCULAR ECONOMY

R+2: effective recycling through Texyloop

HEALTH

PRECAUTION

INDOORAIR QUALITY ENVIRONMENTALFOOTPRINT

CIRCULAR

ECONOMY

*SVHC (Substance of Very High Concern), health and environmental performance

Serge Ferrari assesses the health and environmental performance of its composite materials using 5 indicators.

Level “R” represents the regulations or the basic offer without regulatory requirements. Higher levels represent voluntary advances that exceed regulations.

For more information: please ask for details.

The colours and textures represented in this document are provided as a reference only.
Solar and light properties (EN 14501)

<table>
<thead>
<tr>
<th>Reference</th>
<th>TS</th>
<th>RS</th>
<th>AS</th>
<th>TV n-h</th>
<th>( g_{e}^{\prime} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>381-3101</td>
<td>30</td>
<td>27</td>
<td>43</td>
<td>28</td>
<td>0.22</td>
</tr>
<tr>
<td>381-3105</td>
<td>29</td>
<td>19</td>
<td>52</td>
<td>29</td>
<td>0.22</td>
</tr>
<tr>
<td>381-3108</td>
<td>27</td>
<td>10</td>
<td>63</td>
<td>27</td>
<td>0.21</td>
</tr>
<tr>
<td>381-3109</td>
<td>28</td>
<td>37</td>
<td>35</td>
<td>28</td>
<td>0.20</td>
</tr>
<tr>
<td>381-3113</td>
<td>27</td>
<td>9</td>
<td>64</td>
<td>27</td>
<td>0.21</td>
</tr>
<tr>
<td>381-3117</td>
<td>27</td>
<td>26</td>
<td>47</td>
<td>27</td>
<td>0.20</td>
</tr>
<tr>
<td>381-3118</td>
<td>28</td>
<td>30</td>
<td>42</td>
<td>28</td>
<td>0.20</td>
</tr>
<tr>
<td>381-3119</td>
<td>30</td>
<td>41</td>
<td>29</td>
<td>29</td>
<td>0.21</td>
</tr>
<tr>
<td>381-3120</td>
<td>28</td>
<td>6</td>
<td>66</td>
<td>28</td>
<td>0.22</td>
</tr>
<tr>
<td>381-3121</td>
<td>28</td>
<td>31</td>
<td>41</td>
<td>28</td>
<td>0.20</td>
</tr>
<tr>
<td>381-3123</td>
<td>29</td>
<td>34</td>
<td>37</td>
<td>28</td>
<td>0.21</td>
</tr>
<tr>
<td>381-3124</td>
<td>28</td>
<td>28</td>
<td>44</td>
<td>27</td>
<td>0.21</td>
</tr>
<tr>
<td>381-3125</td>
<td>27</td>
<td>20</td>
<td>53</td>
<td>28</td>
<td>0.20</td>
</tr>
<tr>
<td>381-3127</td>
<td>27</td>
<td>29</td>
<td>44</td>
<td>28</td>
<td>0.20</td>
</tr>
<tr>
<td>381-3128</td>
<td>28</td>
<td>40</td>
<td>32</td>
<td>27</td>
<td>0.20</td>
</tr>
</tbody>
</table>

**TS**: Solar Transmission (%)
**RS**: Solar Reflection (%)
**AS**: Solar Absorption (%)
**TV n-h**: Normal-hemispherical visible light transmission (%)

\( g_{e}^{\prime} \): External Solar Factor

Type "C" glazing: insulating, slightly emissive double glazing in position 3 
\( (4 + 16 + 4; \text{argon-filled} - g=0.59 - U=1.2) \)

TV n-h: Normal-hemispherical visible light transmission (%)
**Exclusive Précontraint Serge Ferrari® technology**

Patented worldwide, Précontraint Serge Ferrari® technology involves keeping the membrane under tension in both directions throughout the manufacturing cycle.

---

**Characteristics**

- Exceptional dimensional stability
- Long-term strength
- Greater coating thickness at the top of the yarns
- Exceptional flatness

**Benefits***

- No deformation during installation and usage: no re-tensioning required
- Maintains its integrity under external aggression (wind loads, impacts, etc.)
- Long-term strength and aesthetic quality
- Smooth finish, easy upkeep

---

**ECO IDentity, health and environmental performance**

Serge Ferrari assesses the health and environmental performance of its composite materials using 5 indicators. Level “R” represents the regulations or the basic offer without regulatory requirements. Higher levels represent voluntary advances that exceed regulations.

For more information: please ask for details.

---

**Soltis FT 381’s ECO Identity profile**

**RENEWABLE CONTENTS**
- R: no bio-sourced constituent

**HEALTH PRECAUTION**
- R+1: substance of very high concern (SVHC *)
- < 0.1% (substances authorised by REACH but listed by the European agency)

**INDOOR AIR QUALITY**
- R: complies with usage-related legislation

**ENVIRONMENTAL FOOTPRINT**
- R+2: specific assessment of an identified supplier
- R+3: effective recycling through Texyloop

**CIRCULAR ECONOMY**

*SVHC (Substance of Very High Concern)*

---

ECO IDentity complies with ISO 14021 environmental communication standard:
- exact
- verifiable
- pertinent
- not misleading
Motorized retractable exterior screen absorb heat, reduce glare and block the sun, provide rain protection, reduce wind speed to create your ideal ambiance. Motorized retractable screen provide a comfortable interior by blocking solar rays, which protects your furnishings, reduces glare and also saves money on cooling costs. Motorized exterior screens can also be used in places such as windows, doors, and especially larger openings in porch to create a pleasant and pest-free outdoor area to enjoy.

We use the best material available with quality fabrication using High Frequency (HF) Radio Frequency (RF) welding is the joining of Ferrari textile materials by supplying HF energy in the form of an electromagnetic field (27.12 MHz) and pressure to the material surfaces to be joined. A generator produces the energy. The tool used to supply the energy is called an electrode. The electrical energy causes the molecules within the material to start moving, which generates heat that causes the material to soften and thereby fuse together. No outside heat is applied. It is instead generated within the material. After cooling the welded surface under maintained pressure, the material is fused and a weld has been created. The weld seam can be at least as strong as the surrounding material – or even stronger. Contact us at http://flshutters.com/

Retractable solar screen, exterior screen and exterior shade.

<table>
<thead>
<tr>
<th>Technical properties</th>
<th>Soltis FT 381</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front face</td>
<td>metallic or pearl finish</td>
<td>EN ISO 2286-2</td>
</tr>
<tr>
<td>Back face</td>
<td>matt</td>
<td>EN ISO 5084</td>
</tr>
<tr>
<td>Yarn</td>
<td>1100 Dtex PES HT</td>
<td>EN ISO 1421</td>
</tr>
<tr>
<td>Weight</td>
<td>550 g/m²</td>
<td>EN ISO 1875-3</td>
</tr>
<tr>
<td>Thickness</td>
<td>0,95 mm</td>
<td>EN ISO 2411</td>
</tr>
<tr>
<td>Width</td>
<td>267 cm (-1 mm/+1 mm)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile strength [warp/weft]</td>
</tr>
<tr>
<td>Tear strength [warp/weft]</td>
</tr>
<tr>
<td>Adhesion</td>
</tr>
<tr>
<td>Porosity</td>
</tr>
<tr>
<td>Extreme working temperatures</td>
</tr>
</tbody>
</table>

Comparative analysis depending on end-of-life scenarios

<table>
<thead>
<tr>
<th>Texyloop® recycling</th>
<th>Incineration</th>
<th>Landfill</th>
<th>Functional unit = 1 sqm FT 381 material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource depletion</td>
<td>0.015</td>
<td>0.083</td>
<td>0.082 kg Sb eq</td>
</tr>
<tr>
<td>Global warming</td>
<td>1.29</td>
<td>3.66</td>
<td>3.29 kg CO₂ eq</td>
</tr>
<tr>
<td>Energy Consumption</td>
<td>43.3</td>
<td>80.7</td>
<td>80.7 Megajoules eq.</td>
</tr>
<tr>
<td>Water consumption</td>
<td>87</td>
<td>234.5</td>
<td>233.5 Litres</td>
</tr>
</tbody>
</table>

Flame retardancy

<table>
<thead>
<tr>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1/NFP 92-507 • Method 1 et 2/NFPA 701 • Class A/ASTM E84 • CSFM T19 • 1530.3/AS/NZS • Group 1/AS/NZS 3837 • G1/GOST 30244-94 • B1/DIN 4102-1 • BS 7837 • VKF 5.3/SN 198898</td>
</tr>
</tbody>
</table>

Euroclass | B-s2,d0/EN 13501-1 |

Management systems

Quality | ISO 9001 |

Certifications, labels, guarantees, recycling

Serge Ferrari