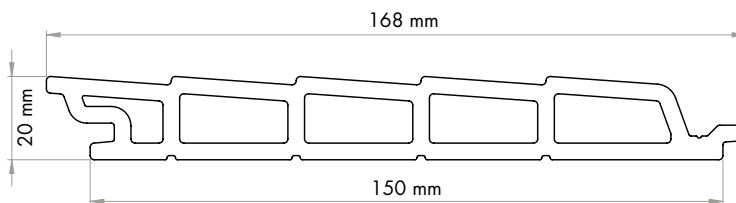


Technical Specifications

MATERIAL UPM ProFi Facade is manufactured from a new generation of wood plastic composite material. The principal ingredients are specially selected clean plastic polymers and wood based fibres which fall as surplus by-products in self-adhesive label manufacture and processing. The material is virtually lignin free and contains no harmful chemicals.

STRUCTURE Hollow composite profile made by extrusion technology.

PROFILE DIMENSIONS Length: 4 m
Weight: 1.8 kg/m



ENVIRONMENT As there is no other significant re-cycling process for the label surplus material, the manufacture of UPM ProFi Facade actually reduces land-fill and waste incineration. The only added plastic is clean polypropylene. Production waste and off-cuts can be recycled into new UPM ProFi Facade. The material can also be disposed of with normal household waste for example to be converted into energy.

UPM ProFi[®] Facade



PHYSICAL AND MECHANICAL
PROPERTIES OF UPM PROFI FACADE

Property	Test method	Typical value
Density, g/cm ³	EN ISO 1183*	1.2
Falling Mass Impact, J (1 kg/1500 mm)	EN 477*	no break (>15)
Fire Class	EN 13501-1	E
Thermal Expansion Coefficient, 1/°C	ISO 11359-2*	4.0 x 10 ⁻⁵
Thermal Transmittance (U-value), W/m ² K	ISO 8990 (2004)	3.0
Water Absorption (24 h), %	EN 317*	< 3
Swelling, thickness (24 h), %	EN 317*	< 1

* based on CEN/TS 15534 wood plastic composites (WPC)

THERMAL EXPANSION:
INDICATIVE CHANGES IN LENGTH
AT DIFFERENT TEMPERATURES

As with all wood plastic composites, UPM ProFi Facade will expand and contract with changes in temperature. The following table illustrates this effect over different temperature changes. The temperature change listed relates to the temperature of the board, not the air temperature. In strong sunshine, darker coloured panels will reach higher temperatures than lighter coloured panels.

THERMAL EXPANSION /
SHRINKAGE OF
UPM PROFI FACADE

temperature change of panels	mm expansion/shrinkage 3,0 m panel
10° C	1
20° C	2
30° C	3
40° C	5
50° C	6

based on an expansion coefficient of 0.04 mm per 1° C per 1 m length

COLOUR WEATHERING
AND MAINTENANCE

Unlike other WPC and timber cladding, UPM ProFi Facade is virtually lignin free, and will therefore not suffer from the usual "greying". Instead, over the years, the colours will fade slightly. The pictures below give an indication of the colour change that occurs during a three year simulation of climate conditions in Northern Europe. Cleaning with a jet hose or a normal hose and brush will help to maintain the colour. Such cleaning should be carried out on demand to ensure that surface is free of dirt and debris. UPM's unique closed surface is very resistant to moisture absorption and therefore stains. If cleaned immediately after a spill, water is usually enough to remove all traces. Otherwise warm water, a household detergent and gentle brushing may be used.



BEFORE



AFTER

