

## COMPOSITE TECHNOLOGY

Composites are materials that are comprised of strong load-carrying fibre reinforcement embedded in a polymer, known as matrix. The reinforcement results in a very strong and rigid material at very low weight, and the matrix can be combined in many different ways in order to meet specific requirements.

Pultrusion is a process that enables continuous production of composite profiles with constant cross sections and material properties tailored to specific purposes. The method enables very complex shapes to be produced, and ensures consistent quality that can be reproduced.

## **ENVIRONMENTAL ASPECTS**

Composite products have a positive influence on the environment through reduced energy consumption – both in the production itself and in use. They have a very long life span, and are both material- and energy recyclable and compliant with the EU legislation.

### MATERIAL PROPERTIES

Composite materials have tremendous advantages over traditional materials, such as:

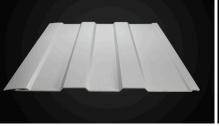
- · Low electrical and thermal conductivity
- Exceptional strength to weight properties
- · Chemical and corrosion resistant
- Excellent structural properties and dimensional stability
- Independent of temperature extremes and humidity
- · Water and weather resistant

# APPLICATIONS WITHIN THE BUILDING INDUSTRY

Composite materials have steadily gained ground in nearly all industry sectors – inclusive the building and construction industry – where the fundamental properties of composites offer benefits over conventional materials.

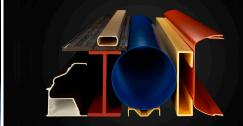
Examples of such applications:

- · Door- and window profiles
- · Doorstep profiles/thresholds
- Facade profiles
- Structural profiles









## COMPANY

VELLO NORDIC AS is a leading Norwegian company developing and manufacturing pultruded composites since 1965. Our products are based on glass fibre, basalt and carbon fibre for use in advanced applications, where the use of light weight high strength composite materials is a driving force in new technology.

VELLO has an outstanding competence and knowledge within this field, where we combine specialists with PhD in polymer chemistry and years of experience in tailoring products to meet our customers requirements.

#### **VELLO NORDIC AS**

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