

# CE Marking of Sandwich Panels

We offer a complete service of testing and certification to access the European market.



**Sandwich panels** are construction products made of externally-profiled steel sheets. They provide mechanical strength to a core of insulating material, such as polyurethane PUR, wool or PIR. It is a product widely used for industrial buildings, sports centres, or large facilities, to facilitate the performance of thermal and acoustic insulation.

## International regulations (EU)

To access the European market, sandwich panels must meet the requirements of the quality and safety parameters defined in the **Construction Products Regulation 305/2011 (CPR)** scheme in regards to:

- Mechanical resistance and stability
- Fire safety
- Health
- Hygiene
- Environment
- Safety in use
- Protection against noise
- Energy saving
- Thermal insulation

## CE Marking

Standard **EN 14509** (Self-supporting double skin metal faced insulating panels – Factory made products – Specification) regulates the CE marking of sandwich panels. A Notified

Body must perform the required testing under this regulation in order for the product to acquire the certification.

## CE marking through ETAG (EOTA)

Manufacturers of sandwich panels can also obtain their CE marking by way of the **European Technical Approval Guideline (ETAG) 018**. The European Technical Approval (ETA) is a document that comprises a technical assessment of the various characteristics of a product's performance not covered, either partially or fully, by a harmonised technical specification.

## Our methodology

Our team of engineers studies each project to determine the optimal testing plan:

- Study of families of products to test according to their type and the desired market access conditions
- Assessment of the number of test samples and design of the optimal testing plan.
- Carrying out tests and issuing the corresponding reports.
- Issuance of an EXAP report where required for the extended application of fire resistance test results.

Applus+ is a **Notified Body (NB 0370)** for the CE marking of sandwich panels and we have a vast experience in providing this type of service in partnership with EOTA member organisations. We provide technological support to manufacturers of the construction industry in accordance with the **Construction Products Regulation (CPR)**.

We carry out all relevant tests in our laboratories, according to the specifications of standard **EN 14509**:

- **Mechanical tests:** grouped in families of flat and profiled panels. We test parameters of purity and type of core.
- **Durability tests:** Applied to panels for external applications. This tests focus on the accelerated aging effect of temperature and humidity, which depends on each core material.
- **Thermal transmittance:** These tests measure the thermal transmittance value of the panel (U), incorporating the declared thermal conductivity for the core material, the joints and any profiles facing.
- **Reaction to fire:** Determined by the minimum and maximum thickness of each geometry and type of panel in order to cover the whole range. According to the appropriate Euroclass, we test under **EN ISO 1182, EN ISO 1716, EN 13823 or EN ISO 11925**.



- **Other related tests:** external fire performance for roofs, fire resistance, water permeability, air permeability, airborne sound insulation, sound absorption, etc.

## About Applus+ Laboratories

Applus+ is a global leader in testing, inspection and certification and has over 23,000 employees operating in up to 70 countries. The Applus+ Laboratories division is a benchmark in Europe in the field of testing and certification of fire safety. We have our own versatile network of laboratories and unique facilities for full-scale fire testing both in tunnels and in the open. We offer a complete service to manufacturers of fire protection products:

- Fire testing in a laboratory
- Certification and access to international markets
- Full-scale fire simulation and testing in tunnels
- Full-scale open-field fire testing