CLADDING AND ROOFING

Cladding and roofing products constructed from metallic sheeting, or from metallic sheeting in combination with other materials and components. The cladding and/or roofing products, including any associated components, may be used in structural or non-structural applications.

ABOUT STEEL CONSTRUCTION INSTITUTE

SCI (Steel Construction Institute) has been a trusted, independent source of information and engineering expertise globally for over 30 years, and remains a leading, independent provider of technical expertise and disseminator of best practice to the steel construction sector. SCI are committed to offering and promoting sustainable and environmentally responsible solutions.

The industry look to SCI for reliable and robust technical information on the effective use of steel in design, including the latest codes and building regulations and Eurocode advice.

Following SCI’s success of the SCI Assessed scheme, SCI Product Certification will provide assurance that your product meets all relevant, current requirements, and has been developed to follow the requirements of EN ISO/IEC 17065, Conformity assessment - Requirements for bodies certifying products, processes and services.

Our certificates offer clear, unambiguous statements about compliance and are structured to follow the Basic Work Requirements for construction works as set out in the Construction Products Regulation. This SCI Product Certification Scheme evaluates construction products or systems. It is recognised by the construction industry as a rigorous, impartial and independent assessment of a product’s performance, and is going through the UKAS (United Kingdom Accreditation Service) accreditation process.

The aim of the scheme is to help manufacturers differentiate their products in the market, and provide confidence to specifiers, end users and other interested parties that the products fulfil specified requirements.

To be awarded an SCI Product Certificate a product or system has to pass a comprehensive assessment consisting of, but not limited to:

- Laboratory test and calculation data
- Technical and design data
- Design protocol
- Full set of design calculations
- Inspections of production
- Checks on compliance with Building Regulations
- Consideration of other statutory or non-statutory requirements
- Regular monitoring of product manufacture

Compliance will be assessed by means of a submitted technical manual and supporting information.
MECHANICAL RESISTANCE AND STABILITY – BWR 1
The product shall be capable of supporting the specified loadings with adequate safety against structural collapse and inadmissible deformations.

The product shall be designed and constructed in accordance with an SCI recognised design code.

SAFETY IN CASE OF FIRE – BWR 2
The cladding or roofing product shall be designed and built in such a way that in the event of an outbreak of fire:

- The system can contribute to limiting the external spread of fire
- The spread of fire to neighbouring construction works is limited
- Occupants can leave the works or be rescued by other means
- The safety of rescue teams is taken into consideration

For reaction to fire and external fire performance the individual components shall be tested using an appropriate test method and/or classification.

HYGIENE, HEALTH AND ENVIRONMENT – BWR 3
Areas to consider are:

- Vapour permeability and moisture resistance
- Water-tightness for external envelope and internal surfaces
- Release of dangerous substances

SAFETY IN USE – BWR 4
Resistance to eccentric loads including impact may be assessed on the basis of standard design details.

The guidance in the CWCT Standard for Systemised Building Envelopes should be applied.

PROTECTION AGAINST NOISE – BWR 5
The external envelope shall provide the necessary airborne sound insulation applicable to the intended use and location of the building.

ENERGY ECONOMY AND HEAT RETENTION – BWR 6
The product may contribute to the:

- Wall or roof providing the necessary thermal insulation that is applicable to the intended use of the building
- External envelope of a building to be able to provide adequate airtightness to limit unnecessary energy loss and to prevent discomfort to occupants.

SUSTAINABLE USE OF NATURAL RESOURCES – BWR 7
The construction works must be designed, built and demolished in such a way that the use of natural resources is sustainable and in particular ensure the following:

- Reuse or recyclability of the construction works, their materials and parts after demolition;
- Durability of the construction works;
- Use of environmentally compatible raw and secondary materials in the construction works.

FACTORY PRODUCTION CONTROL (FPC) REQUIREMENTS
The client shall establish, document and maintain an FPC system sufficient to maintain the manufactured quality of the product.

A system developed in accordance with BS EN ISO 9001, that includes the specific requirements of this scheme, would also meet the requirements for FPC.

The following is a guideline to the scheme requirements for each of the basic work requirements (BWR) under the CPR. For the full set of requirements please refer to the technical scheme document TSD002, available from SCI.