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BBA BRITISH BOARD OF AGRÉMENT
TECHNICAL APPROVALS FOR CONSTRUCTION

Novelis Deutschland GmbH

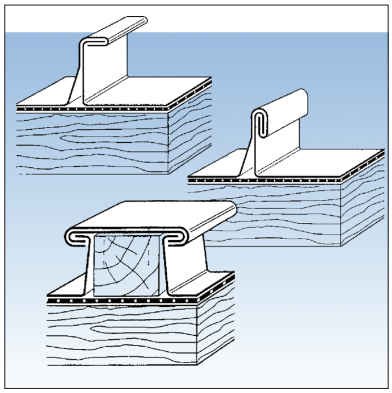
FALZONAL PVDF COIL-COATED ALUMINIUM COIL AND SHEET

Certificate No 04/4083

DETAIL SHEET 2

*Second issue**

Product



- *THIS DETAIL SHEET RELATES TO FALZONAL PVDF COIL-COATED ALUMINIUM COIL AND SHEET, PRODUCED IN LOCK-WELT QUALITY FOR USE AS EXTERNAL ROOFING OR CLADDING.*
- *The product is available in a range of colours and two gloss levels (20 units and 40 units).*

This Detail Sheet must be read in conjunction with the Front Sheets, which give the product's position regarding the Building Regulations, general information relating to the system, and the Conditions of Certification.

Technical Specification

1 Description

1.1 Falzonal PVDF Coil-Coated Aluminium Coil and Sheet is manufactured from 0.7 mm thick aluminium alloy of grade AW-3005 to BS EN 573-3 : 1995, temper designation H41 to BS EN 515 : 1993. Therefore the product meets the material requirements for fully-supported aluminium sheet for roofing specified in BS EN 507 : 2000.

1.2 The product is coil-coated with a primer and PVDF topcoat to a total thickness of 24 µm (or 40 µm for selected metallic colours). A lacquer coat 3 µm thick is applied to the reverse side.

1.3 The product is available in a range of metallic and non-metallic colours at gloss levels of 40 and 20 units respectively.

1.4 A protective polyethylene film is applied to the top surface of the product, printed with the Novelis and Falzonal logos.

2 Delivery and site handling

2.1 Coils are normally supplied at a width of 600 mm and a variety of lengths, resulting in coil weights from 120 kg to 1000 kg. Other widths can be supplied on request.

2.2 The product may be delivered to site either in coils for on-site roll-forming, or as preformed sheets, formed by a third party and cut to specified lengths.

Design Data

3 General

3.1 Falzonal PVDF Coil-Coated Aluminium Coil and Sheet after roll-forming or brake pressing, is suitable for use as fully-supported roofing or cladding using the Lock-Welt system.

3.2 The metallic coatings are directional. To avoid contrast all sheets should be fixed in the same (machine) direction, using the information printed on the protective film as a guide. Each elevation should be clad with material from the same batch.

4 Workability

The product can be worked and folded into the shapes and configurations described in CP 143-15 : 1973 without damage to the substrate or coating. The correct tools, in good condition, are used to prevent damage to the coating, and swarf should be removed. The protective film should be left on the product as long as possible to prevent scuffing or scratching of the paint finish.

5 Performance in relation to fire

5.1 When tested to BS 476-6 : 1989, a sample of the product with colour reference 1775 achieved an index performance I=0 with sub-index (i_1=0) and to BS 476-7 : 1997, achieved a Class 1 surface. This product, therefore, has a Class 0 or 'low risk' surface as defined in the national Building Regulations.

5.2 A sample of colour reference 17H8 of the product, when tested to BS 476-3 : 1958 had an EXT.S.AA rating.

5.3 This performance may not be achieved by other colours of the product. The designations of other colours should be confirmed by:

England and Wales

Test or assessment in accordance with Approved Document B, Appendix A, clause 1

Scotland

Test to conform with Table to Annex 2C(1) or 2E(2) of Regulation 9

(1) Technical Handbook (Domestic).

(2) Technical Handbook (Non-Domestic).

Northern Ireland

Test or assessment by a UKAS accredited laboratory or an independent consultant with appropriate experience.

5.4 The reverse side's lacquer coating is also a Class 0 or 'low risk' surface.

6 Durability

6.1 The product will perform effectively as a cladding or roofing, with an ultimate life of at least 30 years.

6.2 In some industrial environments, maintenance painting to restore the sheet's appearance may be necessary after 20 years.

6.3 A planned maintenance cycle should be introduced if an extended design life is required.

Installation

7 General

7.1 The installation of Falzonal PVDF Coil-Coated Aluminium Coil and Sheet is designed and carried out in accordance with CP 143-15 : 1973 and the Certificate holder's installation instructions.

7.2 Traditional bending and folding techniques are employed using either hand or power-operated tools.

7.3 The protective film covering the product has a perforated strip running down each edge. This is removed immediately prior to the folding of standing seam joints to prevent the trapping of the film within the fold.

Bibliography

BS 476-3 : 1958 *Fire tests on building materials and structures — External fire exposure roof test*

BS 476-6 : 1989 *Fire tests on building materials and structures — Method of test for fire propagation for products*

BS 476-7 : 1997 *Fire tests on building materials and structures — Method of test to determine the classification of the surface spread of flame of products*

BS EN 507 : 2000 *Roofing products from metal sheet — Specification for fully supported roofing products of aluminium sheet*

BS EN 515 : 1993 *Aluminium and aluminium alloys — Wrought products — Temper designations*

BS EN 573-3 : 1995 *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Chemical composition*

CP 143-15 : 1973 *Code of practice for sheet roof and wall coverings — Aluminium. Metric units*

BBA BRITISH BOARD OF AGRÉMENT TECHNICAL APPROVALS FOR CONSTRUCTION

On behalf of the British Board of Agrément

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Chief Executive

**Original Detail Sheet issued 9th March 2004. This amended version includes a change of name of Certificate holder and product name.*

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