

National Building Specification (NBS)

Cora system



Design description

Profile series for the production of wood-aluminium systems System Cora.

Technical requirements and system-specific verifications

The aluminium profiles are made of EN AW-6060 T66 in anodised quality and are available in accordance with DIN EN 755 and DIN EN 12020. The execution must be carried out in accordance with the relevant standards and guidelines, the recognized rules of technology and the specifications of the system provider.

Driving rain tightness class 9a*

Air permeability class 4*

* Tightness properties are determined by the underlying wooden window.

Thermal insulation of the frame U - values according to DIN 10077-2:2003-10, $U_f = 1.5 \text{ W/m}^2\text{K}$ depending on profile geometry

averaged over the lower and lateral/upper part of the frame.

The system

Wooden

The wooden construction must be carried out in accordance with the requirements of DIN 68121 for wooden windows. The sashes and fixed glazing are to be provided with glazing strips. The insulating glass edge seal is taken up on three sides in the wood rebate.

Grooves in the wooden profiles to accommodate the aluminium profiles are not permitted.

Aluminium frame

A space-shifted system shall be offered. The offset between the frame and the sash must be approx. 16 mm. The offset between the aluminium wing profile and the glass is approx. 28 mm. The joint between the frame profile and the timber, as well as between the timber profile and the transom, is made flush with the surface. The frame and sash profiles, as well as the element-dividing timber and transom profiles have a rounding of the profile edge with a radius of 1 mm. The drainage of the rebate area is carried out invisibly behind the lower transverse profile by using an aluminium rain rail.

In the case of combined elements containing sashes and fixed glazing within a frame, the outer edges of the aluminium profiles running around each span must be the same distance from the outer edge of the wooden frame.

The design of the aluminium frames must be carried out with mechanical connection.

The corner joints are to be made with sturdy metal corner brackets, which are to be punched with the aluminium profile with 8 punching points per angle. Alternatively, the screwing of the corner brackets to the profile is permitted.

Fastening of the aluminium frame

The aluminium frame is attached to the wooden frame using removable swivel and twist clip holders made of high-quality, temperature-resistant plastics such as impact-resistant modified POM. A stress-free expansion of the aluminium shell to the wooden part and the full-surface rear ventilation of the gap between the wooden and aluminium frame must be ensured.

Seals

The gasket between the sash and the frame is to be designed as a commercially available sash rebate gasket, which is to be arranged circumferentially in a plane outside the weathering zone.

The glazing must be designed on the outside as wet glazing with suitable permanently elastic sealant.

Pictures

