

National Building Specification (NBS)

MIRA



Design description

MIRA: Profile series for the production of wood-aluminium systems with the same wood thicknesses on the sash and frame system MIRA.

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*

Class 1 operating forces

Suitability for RAL-tested windows system verification

Suitable as fall-proof glazing according to
DIN 18008-4, category A, C2, C3 incl. test certificate.

* must also be for the invisibly screwed glass bead, if this is done.

Thermal insulation of the frame e.g. spruce, U values according to DIN 10077-2:2003-10, $U_f = 1.1$ W/m²K depending on profile geometry

The system

Wooden

The timber construction must be carried out in accordance with the requirements of DIN 68121. The sashes are to be provided with milled glazing bead, fixed glazing with screwed glazing bead. The system must enable invisibly bolted fixed glazing.

Fixed glazing design:

Optional:

Glass bead visibly screwed

Glass bead invisibly screwed

The insulating glass edge seal is taken up on both sides in the wood rebate.

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

Aluminium frame

The offset between the frame and the sash must be 15 mm. At the joint between the frame profile and the setting timber, as well as between the setting timber and the transom profile, an offset of 2 mm must be made in each case. The circumferential frame and sash profiles must have a rounding of the profile edge with a radius of 5 or 2 mm, the profiles dividing the element must have a radius of 2 mm. Sash profiles are to be designed with a hollow chamber to increase the rigidity in the glazing area. The drainage of the seam area is carried out by concealed punches in the lower profile crosspiece. Optionally, visible drainage with an aluminium cover cap in the colour of the aluminium frame must be possible. The design of the aluminium frames must be possible with either a mechanical or welded connection.

Optional:

mechanical connection (stamped)

welded connection

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. Rotary holders are generally used on the sash. 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. The gap must therefore be made with a distance of at least 4 mm. In order to determine the exact dimensional position, the holders must be prepared with a cast-in spacer knob.

Seals

A circumferential, corner-vulcanizable seal made of APTK is to be installed on the frame between the wooden frame and the wooden sash. In the case of heavy driving rain, it must optionally be possible to mount a gasket between the aluminium frame and the aluminium sash transversely at the bottom.

It must be possible to provide glazing on the outside with a circumferential APTK dry glazing seal. The sealing lip on the glass must not be visible wider than 5 mm. Wedge gaskets as an external glazing seal are not permitted. On the inside, it must be possible to carry out dry glazing with APTK seals in graduated seal thicknesses. The system must be optionally available as wet glazing on the outside and inside.

Optional:

Dry glazing

outside

inside

Wet glazing

outside

inside

Excluded are wooden windows with metal cover and rain rail, as well as constructions that are clad with wooden profiles on the room side.

For reasons of recycling, no foamed profile systems are permitted.

Pictures

