Nembo

windows technical specifications

Features

Wooden windows and French window with outer aluminium cladding for external application only. The materials we use are stocked in a storehouse that is naturally aired, and it is thermo-hygrometrically balanced with the environment. It's humidity level, when we start working it, varies according to the type of wood and it can range from 10% to 16%.

External Aluminium Cladding

The aluminium profiles are joint to the wood at a distance of 5 mm through turning clips in order to let the two materials distend naturally as well as to favour a proper internal ventilation. The reason why we do this is to avoid the formation of condensation , which is harmful to wood. Aluminium is varnished in full obedience of the European quality mark "Qualicoat" as well as of the German quality mark "Ral". The aluminum cladding has a linear, slightly shaped design. The corners of the aluminum coating are joined.

Frame

Fixed wooden frame with a 60x54 mm section (with external aluminium cladding frame section 80x74 mm). The profiles are made so that the ends of stile and transom perfectly match, and they are double-tenoned together at right angle. Gluing made with adhesive tested in accordance with regulation EN 14257 (ex WATT 91). As regards windows, frame on four sides with drip got out of the external aluminium covering through slots in order to ease rain drainage. As for French window, frame on three sides and grey pultruded lowered sill with holes for water drainage. The anti-barrier lowered sill in no more than 25 mm-high, in accordance with the current regulations.

Leaf

Fixed or openable wooden sashes with a 81x54 mm section (with external aluminium cladding leaf section 81x74 mm). The profiles are made so that the stile and transom ends perfectly match, and they are double-tenoned together at right angle through anti-twist tenon and dead hole. Gluing made with adhesive tested in accordance with regulation EN 14257 (ex WATT 91). The gap between wood and aluminium to avoid the formation of condensation and guarantees airing of the glass, in accordance with the current regulations. Profiling and squaring are made for a 12 mm hardware system, which means that the distance between the two leaves is 12 mm. Standard French window has two cross pieces lower.

Hardware

Silver hardware undergoes a galvanic zine-coating process which is completely exempt from hexavalent chromium. It is made with steel and highly corrosion-resistant alloys, in conformity with the class 5 resistance requirements, in accordance with regulation DIN EN 1670. In case of application in spaces where a high heat-resistance is required, please fix the suitable hardware system with the windows maker. Locks are certified with the "Ral" quality mark(in accordance with regulation DIN EN 1326-8) and they have been tested upon 10.000 openings and shuttings. **Current supply**: turn-only windows; grey covering flush hinges adjustable on three axles, maximum weight capacity 110 Kg per leaf; silver anodized aluminium handle.

Product performance features

All windows are packed with the relevant performance declaration made by the window maker in accordance with regulation UE CPR 305/11/CEE as well as with the product regulation UNI EN 14351-1. Every window has its own features shown such as: thermal properties, sound-insulation as well as its air, water and windresistance properties. The turn-only window with frame measuring L 1300x1500 H mm, two sashes, with lowemission glass (Ug=1,0), warm edge spacer, glass with acoustic insulation 31db, features these properties:

Wind-resistance	C5 class	UNI EN 12210
Water-tightness	E900 class	UNI EN 12208
Air-permeability	4 class	UNI EN 12207
Thermal transmittance value	Uw=1,3	UNI EN 10077-1 e 2
Acoustic-insulation	Rw(C,Ctr)= 33 (-2;-6) db	UNI EN 14351-1 appendix B