

**The Solarlux “SDL Akzent Plus” Wintergarten is a thermally insulated aluminium profile system where the structural members are located on the outside. This type of construction makes a variety of designs possible without being limited to standard types. By installing the appropriate units, glazing, ventilation and shading facilities, the EnEV requirements for heated wintergardens of habitable room standard are met.**

### Design features

- | The roofing system is fully thermally insulated. Relevant test certificates as required by EN ISO 10077 have been obtained.
- | The gently curved powder-coated profiles create a pleasing sense of aesthetic unity. The design is elegant and timeless.
- | Roof pitches of 5° to 45° are possible. The junction to the wall makes installation work simple. The hinge-type profile joint adapts to the pitch of the roof.
- | The design provides for roof glazing from 28 to 42 mm supported from 4 sides. The glazing rebate depth, glazing rebate ventilation and drainage, all meet the requirements of the glazing industry.
- | The hip rafters which are provided with an integrated cover are linked with a hinge-type profile without any visible screw joint and allow for any bespoke design.
- | The wide variety of profiles available offers a choice of profile appropriate to the property and suitable for the size and structural requirements of the wintergarten. Cavities in the structural profiles provide accommodation for steel reinforcement. In this way, large roof structures and maximum openings and spans are possible.
- | The units are fitted with the necessary distance from supports and the gutter so that expansion of the units due to temperature fluctuations can be absorbed without causing problems. The gap is filled by expanding foam tape (Kompriband) or expanding foam.
- | The units are fitted with the necessary distance between the unit rebates and the supports as well as the eaves. Thus dimensional inaccuracies of the building structure and components can be compensated for.
- | The thermally insulated supports with external unit rebate are suitable for all unit thicknesses from 50 to 80 mm and are fitted without any visible screw joints. The beading on the inside is carried out with glazing beads to the supports and the eaves.
- | The side rafters supplied ensure the same thermal insulation below the rafter without any additional beading as the entire profile system. The 24 mm high rebate at the outside with additional gasket makes it possible to fit the units without difficulty, even under the side rafters. Below the side rafters, the units are beaded on the inside with aluminium strip material.
- | The drainage of the roof is carried out by a horizontal gutter and an aluminium cladded downpipe.
- | The glazing division bar is interlocked with the rafters and is thus capable of transferring the load from the glass to the rafters. The cascading type of drainage is the most effective way of channelling away condensate that may also be formed in the area of the transom and wall rail.
- | Gutter connectors are used to interlock and clamp together gutters at any angle.
- | For the ventilation of wintergardens customers can choose high-grade roof-lights which can be operated manually or electrically. In addition, automatically controlled metering fans and cross-flow fans can be employed.
- | Wintergarten lighting can be elegantly achieved with profiles which have integrated transformers and spotlights which can be clipped to the underside of the rafters.
- | For design work and cost estimating during the planning stage, tables for structural calculations are available for preliminary dimensioning purposes. Structural calculations for the system chosen for the property under consideration are available at short notice.
- | The roof structure of the wintergarten is delivered pre-fabricated and pre-assembled which means that installation times are noticeably reduced. The wintergarten can therefore be installed on site without much additional preparatory work. All end pieces are already mounted, the openings for the downpipes, if detailed, drilled, the bolted joints of the rafters pre-drilled and bolts / connectors inserted into the profiles and all ventilation holes drilled. The adjustable foot plates make an exact alignment of the roof structure easy.
- | The well-proven roofing system does not require silico-ning.
- | The precise dimensions of the units are available from the drawings of the order acknowledgement and can be used for the manufacture of the units which can take place concurrently and would be available at the time of delivery of the roofing structure. In the case of single-pitch roofs, the dimensions for the glass are provided with the order acknowledgement. In the case of other types of roof, the dimensions are made available approximately 1 week prior to delivery. Thus the installation of the complete wintergarten comprising of roofing structure, glazing and units can take place in one go. Thus installation costs are reduced and end users guaranteed satisfied.
- | Preferred vertical elements are Solarlux SL 60e, SL 70e, SL 80 / SL 81 and SL 82.