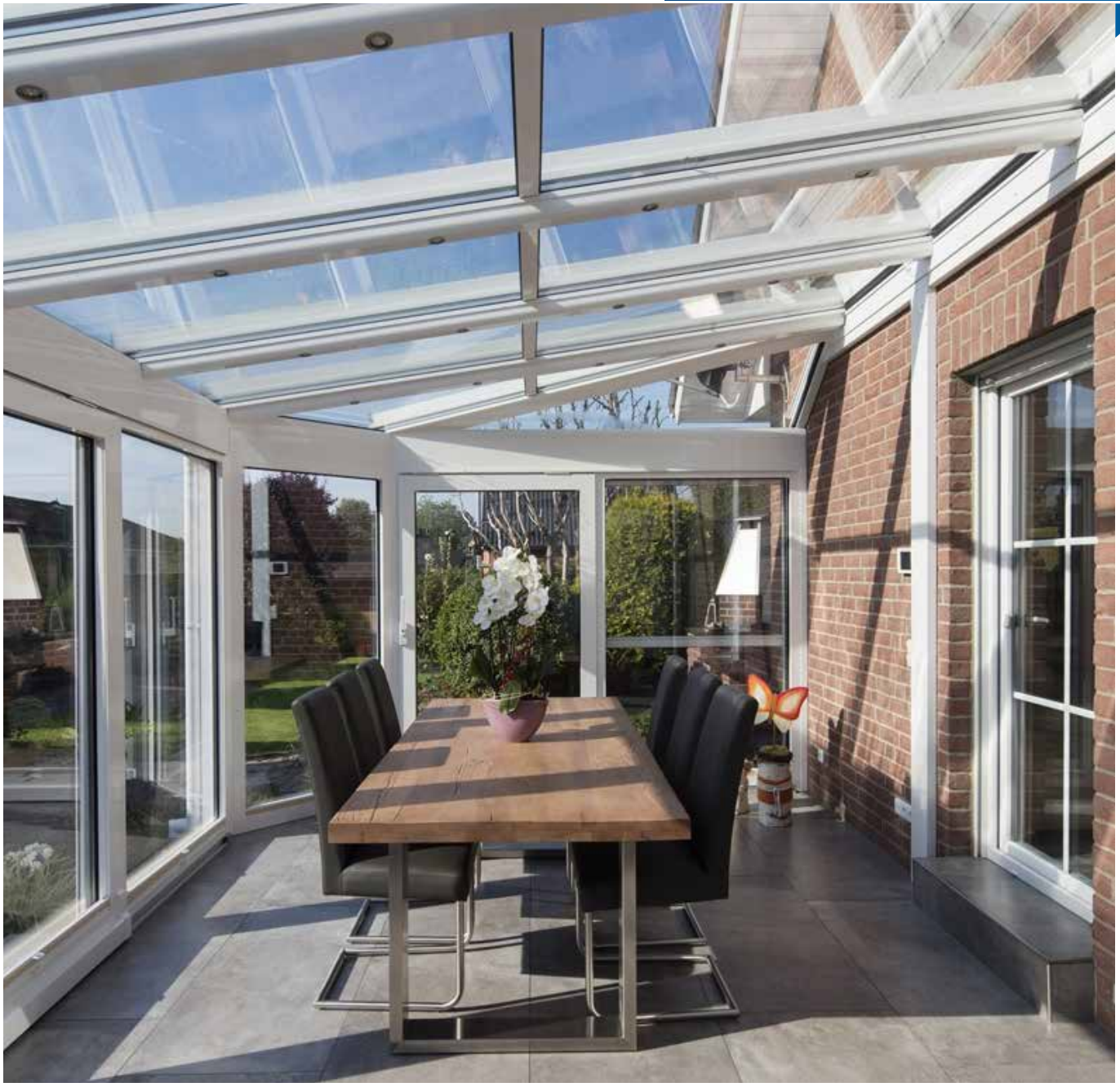
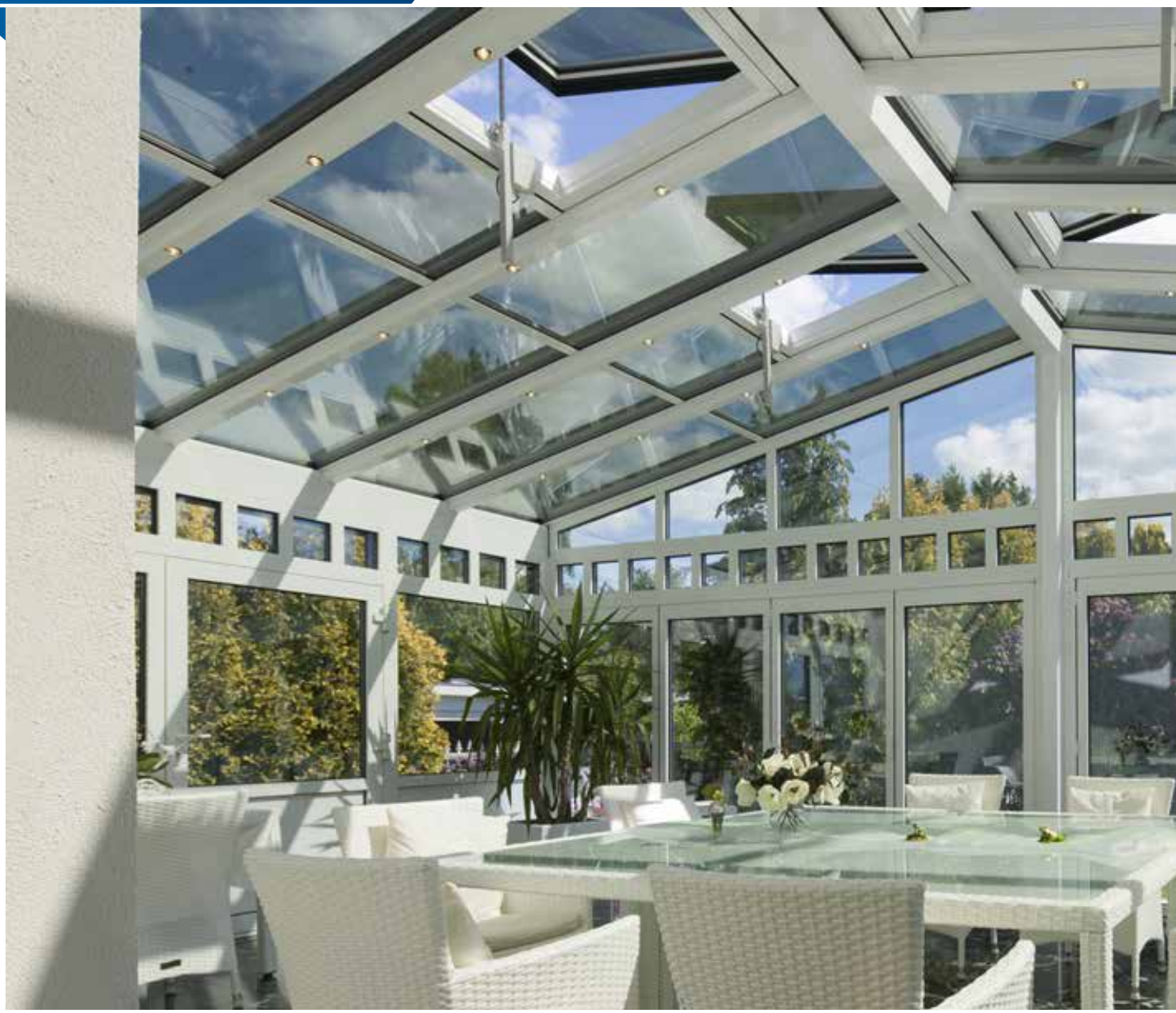


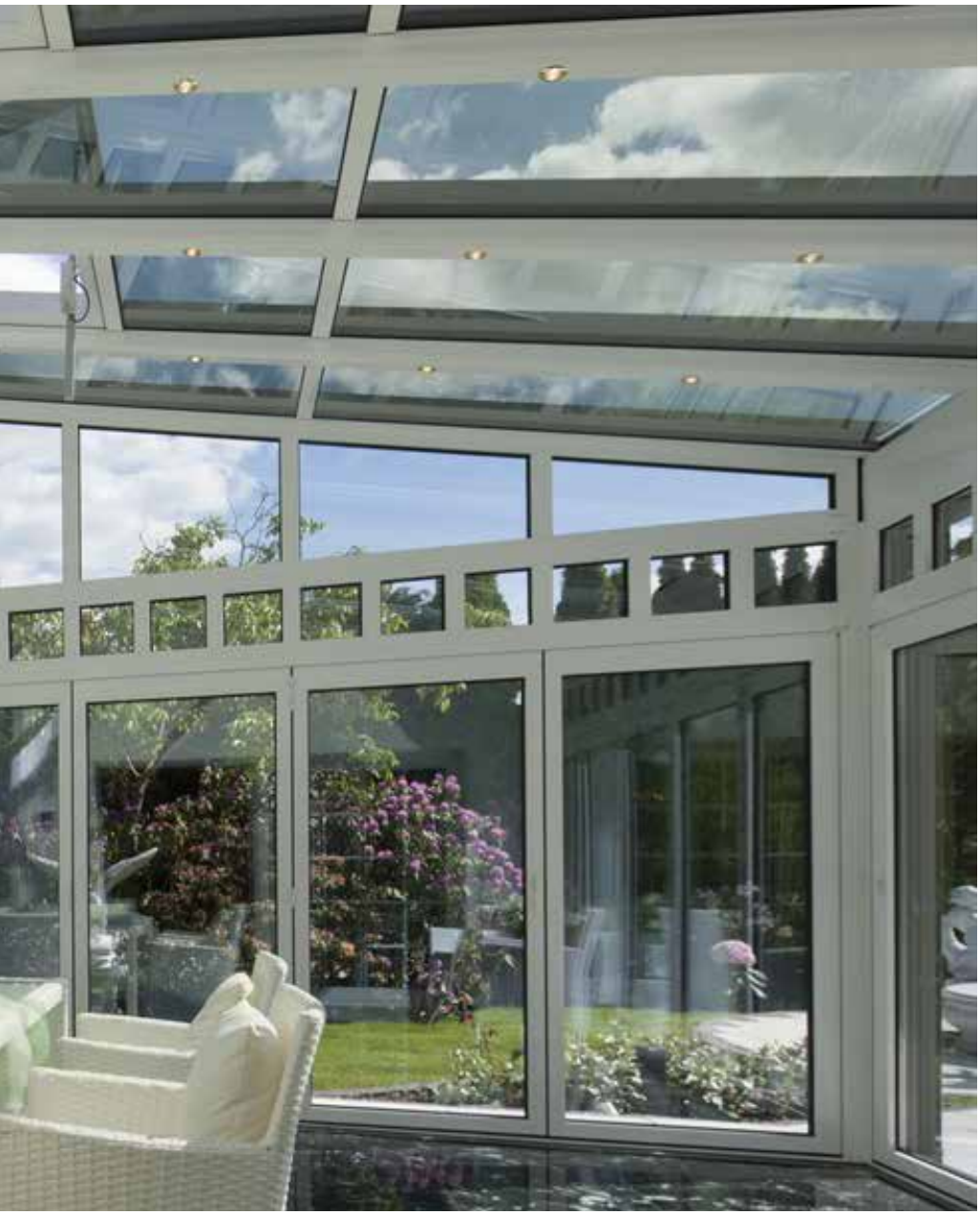
Conservatory like an extension



Autumn is already around the corner, but the modern conservatory will allow you to enjoy the garden for longer. Greenhouse helps to open up space, bring in more light but also make the garden the permanent element of the interior. This additional space for dining or relaxing with family in the sunshine, surrounded by garden will add value to your home.

Conservatory allows to enlarge the lounge or living room and make all year enclosed glass space that can be used as the accommodation. When designing the conservatory, we should define its purpose of determining the technology and final project. The location is also important, but in the UK often it is dictated by the properties features. The amount of sunlight entering the interior will give the optimal conditions for relaxation with a temperature of just over 20C. On the other hand, locating conservatory from the south side should result in more sunlight and higher temperatures what will create perfect microclimate for exotic flowers and plants. However, in such a scenario, some shading elements are recommended. The least favourable location for the conservatory is from the north- there will be little sunlight here so that the room will be shady and slightly cool throughout the year. However, locating from the north is recommended to artists - painters or photographers - due to the even and almost unchanging distribution of light in the interior, allowing work throughout the day.

The construction of the conservatory should be stable and durable - profiles forming its skeleton can not deform under the influence of strong wind or snow. The systems available on the market differ not only in the construction details but, above all, in the material used for their production - wood,



BUILDING CONSERVATORY

STEP BY STEP

1. Remove existing slabs or glass to commence ground works
2. Mark the positions of walls with string lines according to the plans
3. Excavate the foundation
4. Footing depth should be minimum 450mm deep for a dwarf wall construction
5. Back-fill foundation with a concrete. Make it levelled.
6. Build the cavity wall
7. Compact aggregate and sand
8. Lay floor insulation and damp proof membrane
9. Lay 100mm thick concrete on top of the membrane to bring the base slab up to the required floor level. Make it smooth
10. Use matching bricks to build the dwarf walls in accordance to plans
11. Fit insulation to the cavity
12. Use cavity trays and install lead flashing
13. Fit the sill framing on the wharf walls
14. Fix frames and corner posts
15. Fit the french door frame to the side frames and dwarf wall
16. Fit the structural aluminium eaves beam to the head of the frames
17. Install the guttering including any down pipes
18. Fit the starter bars and the aluminium ridge
19. Fix the bars in their positions between eaves beam and ridge
20. Install double glazed sealed units or polycarbonate roof panels
21. Seal the side frames to the house walls
22. Finish the interior with the chosen flooring, skirting, lighting, etc.

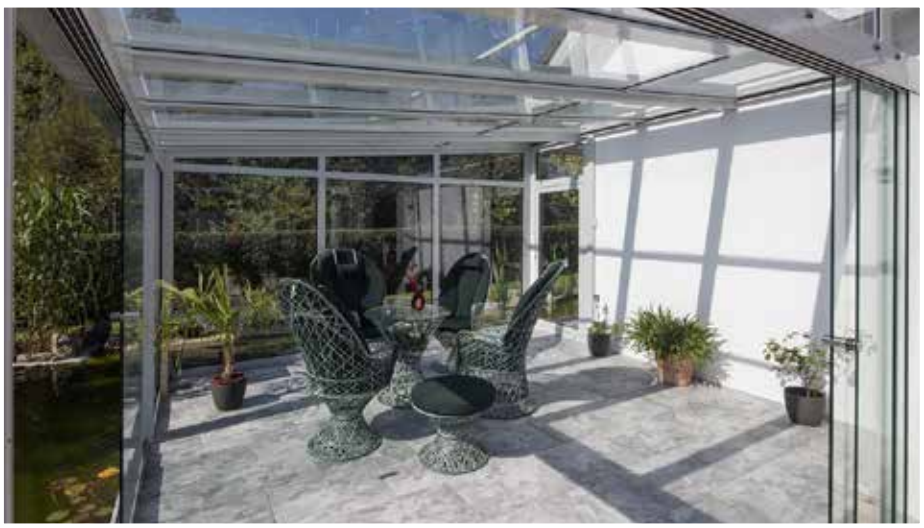
aluminium, steel or PVC are used for this purpose.

Nowadays, on the market, there are available lightweight, durable and corrosion-resistant aluminium profiles which are narrow and result in a larger glazing surface. The eaves structure can be reinforced with aluminium or steel profiles, which allow for sliding or folding doors to be mounted in the walls.

Depending on customer preferences, there are rafters or external masking strips in the soft (flat) version or with a clearly outlined, rectangular shape. Profiles can be finished in any colour: RAL palette, structural or wood-like tones, anode or bicolour, which means a different shade of the profile on the outside and inside. In this way, we can quickly adjust the shape and structure of the conservatory to suit the design and style of the existing building.

The slope of the roof at which the sun's rays will fall at the right angle should be between 5% or 45%. It will result in the best exposure to sunlight- the sun rays will penetrate through it effectively heating the interior. It is recommended to consider solar roofing that reduces UV rays.

The conservatory is made of the safety glass that after breakage will not spill. In case of the south position, it is recommended to select glass covered with a reflective coating that reflects the sun's rays. Conservatory improves the thermal balance of the



building, capturing the sun's heat and leading it into adjacent rooms during the winter. In the summer protects it from overheating, blocking the penetration of heat into the house. The conservatory is also an excellent thermal buffer for the building during the cold autumn-winter period. In both cases, however, it must be perfectly designed and carefully made.

Building Regulations and Planning Permission

Adding conservatory to the existing house is permitted development. Planning permission is not required to build the conservatory unless it is the listed building, or it is on green belt land. The permitted development rights allow to make improvements and alternations to the building like a conservatory within the specific criteria:

- A conservatory cannot exceed the area of half of the land around the building. Sheds and other outbuildings must be included when calculating the above 50% limit.
- A conservatory must not exceed from the rear wall of the existing house further than 3 meters in an attached house or 4 meters in a detached house
- A conservatory must not exceed 4 metres in height (or 3 metres if it is placed within 2 meters of the building)
- Maximum eaves height should be no higher than the eaves of the existing house. The highest part of the conservatory should be no higher than the roof ridge line of the existing home.
- A Conservatory must not be at the front of the building and facing a road.
- A Side conservatory must not have a width greater than half the width of the original house.
- If the building was extended, the planning permission might be required to extend it with the conservatory further

Refer to the Governments Planning Portal for full criteria concerning building conservatory. Always check with your Local Planning Authority whether permitted development rights apply.

Building Regs for conservatories are same as for other build structure unless:

- the total area of conservatory does not exceed 30m2
- 50% or more of walls are of glass
- 75% or more of the roof is transparent glass
- all glazing is of toughened safety glass
- it is single storey on the ground level
- conservatory is separated from the existing building by quality doors, walls, windows
- there must not be any drainage installed
- there is independent heating system- radiators must have their own switch on/off controls
- glazing and electrical installation comply with building regs

Any new structural opening between the conservatory and the existing house will require building regulations approval, even if the conservatory itself is an exempt structure.

If the planned conservatory does not comply with the above criteria there is need to contact local planning authority for advice and approval.