

**ADDITIONAL TECHNICAL CONTRACTUAL CONDITIONS (ATCC)**

**WINDOW SYSTEMS**

**1. General**

1.1 Facade scaffolding shall be provided on site. The Bidder shall therefore calculate his quotation without scaffolding. Should the contractually agreed dates (also including individual dates) not be observed by the Contractor, such that there must be an extended period for the scaffolding, then additional costs incurred in this case shall be borne by the Contractor.

1.2 On request, the system’s all valid test results processed by a recognized institute shall be submitted.

1.3 After placing of order and clarification of technical details, the Contractor shall compile an appropriately suitable plan for work and installation of all elements. Overview drawings shall be in the ratio 1:20 and detail sections 1:5. The basis of workshop and installation plans is the measurement plan provided by the Contractor at the construction site. Possible building tolerances shall be taken into account accordingly. It must be provided that the drawings show the full dimensions of all elements together with connections to the structures. Production of the elements may only begin when the drawings are released for execution by means of an approval sign by the Architect.

1.4 The data sheets attached to the specification serve to show the window distribution and the type of window openings as well as the materials to be used. Displayed are external views with the measurements of the clear shell opening and with the way of assembly.

1.5 Static requirements: All element constructions must be able to take up all forces as planned and to transmit these to the structure. Taking into account the assumed stress loads, the frames and the pane edge between 2 supports may not deflect more than 1/300 of the length; when using insulated glazing, the deflection between the opposite pane edges shall not be greater than 8 mm and if required the Bidder shall provide the necessary static test evidence (profile and glass statics for height > 4.0 m) under the terms of the technical calculation and without any extra charges.

1.6 All steel parts which are no longer accessible after installation should be galvanized. All other steel parts must be protected against corrosion.

1.7 In the case that diverse metals are combined, it must be ensured that there can be no contact corrosion or other currents which could lead to damages of material.

1.8 Sealing profiles must be compatible with all adjoining materials.

1.9 Water must be controlled and immediately diverted. Drainage openings in frames and rebates must be arranged to the external side and protected against build up through wind pressure.

1.10 Locks of incorrect operation must be provided as basic for all sashes and all hardware.

1.11 The glass thickness shall be determined according to the respective manufacturer’s specification and if the glass thickness determined deviates data from the specification, the Contractor’s glass thicknesses shall apply.

1.12 For the determination of wind load and driving rain impact, the data in the attached views shall be taken.

1.13 All backs of window sills shall be provided with sound insulation layers of at least 2 mm strength.

1.14 All elements shall be made in full and ready for use, delivered, and installed incl. all wind and diffusion-sealed connection to the building structure, panels, glazing, window sills, shutter tracks etc. etc.

1.15 Mounting shall be carried out according to the installation guidelines and specifications of the system provider. Professional installation of the elements in conformity with RAL or EnEV is to be calculated under the respective item prices without additional remuneration. Joints between cover frames and brickwork are to be closed completely with suitable insulating materials.

1.16 Until final acceptance of work, the surfaces of all elements are to be protected with suitable protective foils. Before acceptance or at the instruction of the Principal’s site manager, all the protective foils, adhesive labels, mounting aids, and any possible dirt are to be removed and disposed of and the elements are to be thoroughly cleaned.

1.17 Building rubble and all packaging materials caused by the Contractor shall be disposed of by the same.

1.18 All necessary lifting devices, aids, supporting, and bracing structures for the execution of the works shall be provided by the Contractor and included under the unit price calculations.

1.19 In the case that special and permanent measures must be taken by reason of the specified sizes of the window panes (e.g. glazing adhesives, special screws, reinforcement of the profiles and fittings etc.), these must be taken into account without any extra description of the item quoted for. Documentary evidence shall be provided for the long-term functioning of the building parts incl. confirmation by the system provider.

**2. Ancillary Works**

Insofar as not otherwise provided in the tender, as supplementary to valid DIN regulations for the respective works to be carried out, the following works are also deemed as covered under the unit prices:

2.1 Autonomous transfer of the site’s cutting checks (1 per floor) to the respective places of installation.

2.2 Prior completion of part areas according to instruction of the site manager.

2.3 Compilation of adequate workshop and installation plans for all elements.

Sun protection: besides the supply and installation of the systems, sun protection works include the drilling into the building, laying of cables through to the junction box, and sealing of the boreholes.

**3. Execution and Invoicing**

3.1 Works shall be carried out in conformity with DIN 18360 and invoiced accordingly. Measurement and settlement are undertaken according to piece quantities as set forth in the specification.

**4. Notes on Calculation**

4.1 The quoted unit prices are also valid if the outer surface sizes of the elements (shell construction openings) turns out to be 5 % larger or smaller. Deviations beyond this percentage shall be notified immediately to the Principal’s site manager in writing with the subsequently amended quotation. The unit prices of the subsequently amended quotation are not deemed as agreed unless expressly ordered in written form beforehand.

4.2 All elements with electrical fittings shall be installed in such a way that all the cabling is concealed in the frame.

4.3 Elements are independently calculated of the direction of rabbet (DIN Left/DIN Right). For the planning of work and installation, the direction of rabbet is taken from the sectional drawings.