



Technical Attachment

Supply of test greenhouse under heading “**Supply of test greenhouse for comparative analysis**”- Part of the project “**Establishment of Research and Development Center for innovative methods of phenotyping and management of ornamental plants cultivation**”

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1. Description

JMP Flowers GP sp.z.o.o. is going to create test greenhouse for comparative analysis on the roof of new center for research and development building (drawings attached). Scope of supply: delivery of materials (EXW) with drawings without mounting, supervisor, prefab tools or welding equipment. *The period of mechanical warranty should be at least twelve (12) months from delivery date.*

2. Technical specification

Dimensions of the greenhouse:

	Department 1	Department 2
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		Department 1	Department 2
Bay width	m	8	8
No. of bays	q	3,5	0,5

Section distance	m	4,5	4,5
No. of section	q	3	3
length	m	13,5	13,5
Post length	m	6	6
Surface	m ²	378	54

Construction : freestanding

Gutter with supports and gaskets should be delivered for closing space between the green

Wind press on walls	600 N/m ²
Wind press on substructure	600 N/m ²
Basis snow load	1400 N/m ²
Snow load	800 N/m ² house and building

Steel (type S275/235 – box profiles and S235 for the solid steel rods) for substructure and the walls should be hot-dip galvanized according to EN 1461

All nuts and bolts for wall glazing bars and gutter connections should be stainless steel, other bolts and nuts should be galvanized – quality 8.8

Inside steel structure (lattice girders and short posts; horizontal wind braces; gutter posts; trellis girder posts; side and end wall purlins; side and end wall braces; supporting second row of gutters) should be electrostatically coated with white powder

3. Scope of supply

- Steel structure: substructure, gable end walls, side walls ,screening facility, bolts and nuts
- Gutter construction (aluminium)

- Aluminium glazing system
- Roof and wall cladding – glass is not included in scope of supply
- Ventilating system (rack and pinion, driving mechanism – motors should be delivered with built – in potentiometers to provide positional information
- Water discharge system (PVC drain pipe system)
- Doors
- Screening system complete with driving mechanism
- Screens:
 - Top screen Light transmission in sunlight 75%, when overcast 78%, energy savings 67%
 - Bottom screen Light transmission in sunlight 15%, when overcast 24%, energy savings 47%

Purchaser reminds that in each case, when the documentation provided by the Purchaser is given with particular brands of the devices, they are only examples provided to determine the required parameters. The tenderer may propose equipment - manufacturer, type - with technical characteristics not worse than one presented by the sample device.

4. Investment conditions

Supply of the materials EXW

5. Location

08-540 STĘŻYCA, WOJ. LUBELSKIE, ul Zielona 48

6. Responsibility

Principle Project Manager: Tomasz Krupa

Attachments: drawings of the building with greenhouse on the roof