RI SE

TYPE-EXAMINATION CERTIFICATE

C900644

Stair tower

Holder/ Manufacturer/ Supplier

Solideq AS

Rypevegen 2, 2406 Elverum

Product name ALUSCAFF Stair tower

Product description

According to pages 2-4 of this type-examination certificate. Technical documentation as provided to RISE, no. P111335.

Certificate

RISE certifies that the product specified on this type-examination certificate complies with the requirements of the Swedish Work Environment Authority's Statute Book as per the provisions of AFS 2013:4 Scaffolding, Section 10 (RISE certification rules SPCR 064) and SS-EN 12810-1:2004 with associated standards.

Evaluated system configurations

Permissible load 1.0 kN/m2 on stair treads and resting planes within 10 m height or point load 1.5 kN on individual stair treads or resting planes, with conditions according to the product description.

Marking

All main components must be indelibly marked with A 75 RRM, where A 75 is the manufacturer's mark, RR is the year of manufacture and M is the month of manufacture. The products can also be marked with the RISE type-examination label (see below for example).

Validity period

The type-examination certificate is valid until no later than 2032-05-03. The validity of this type-examination certificate can be verified at RISE homepage.

Miscellaneous

RISE conducts annual inspections of type-examined scaffolding components as per Section 5 of SPCR 064.

Martin Tillander

This is a translation from the Swedish original document. In the event of any dispute as to its content, the Swedish original shall take precedence.

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RISE Research Institutes of Sweden AB | Certification Box 857, 501 15 Borås

👟 +46 10 516 50 00 | certifiering@ri.se | www.ri.se

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Product description for ALUSCAFF Stair tower

Design

ALUSCAFF stair towers consist of standards, beams, stairs, diagonal braces, railing posts and guardrail frames, resting planes, etc. Components specific to the stair tower are listed at the top of the component list below. Components and accessories that may be used in ALUSCAFF stair towers, but are included in other type-examination certificates are listed below with a note. Please refer to the respective type-examination certificate for more information regarding these components.

Component	Measurement (m)	Item number
Landing Post alu	1.6×0.6, 1.6×0.6 (gml type)	202013, 202013A
Landing Post steel	1.6×0.6	202007
Staircase alu	2.0×0.8, 1.5×0.8	202015, 202014
Railing for stairs steel	2.0, 1.5	202006, 202005
Railing for stairs alu	2.0, 1.5	202006A, 202005A
Aluminium toeboard for stair tower	1.5, 0.6	R931500, R930600
Railing post steel		202010
Railing post aluminium		202010A
Handrail top 1.0 m steel	1.0	202012
Handrail top 1.0 m alu	1.0	202012A
Foldable guardrail steel		T00112
Foldable guardrail alu		T00112A
Entrance step 1.6 m steel	1.6	202011
Entrance step 1.6 m aluminium	1.6	202011A
Flexible access gate 1.2 m		ZZA070
Base jack, hollow ¹⁾	0.5	T00043
Base jack, solid ¹⁾	0.5	T000423
Standard with bayonet plate ¹⁾	3.0, 2.0, 1.5, 1.0, 0.5	R01300, R01200, R01150, R01100, R01050
Standard without bayonet plate	3.0, 2.0, 1.5, 1.0, 0.5	R02300, R02200, R02150, R02100, R02050
Locking spring for standard, complete ¹⁾	Ø 16×80 mm	T00119
Longitudinal beam ¹⁾	3.0, 1.6, 0.5	R05300, R05160, R05050
Aluminium platform 0.23m ¹⁾	3.0, 1.65	R18305, R18165
Aluminium platform 0.17m ¹⁾	3.0, 1.65	R17305, R17165
Aluminium platform 0.1m ¹⁾	3.05	R10305
Double guardrail ¹⁾	3.0, 1.6, 2.3	R11300, R11160, T00082
Single guardrail ¹⁾	3.0, 1.6, 0.5	R10300, R10160, R10050
Diagonal brace alu ¹⁾	H = 2, L = 3.0, 1.6, 1.2	R15300, R15160
Telescopic diagonal brace ¹⁾	Bay length: 1.2 – 3.0 m	R15000
Toeboard alu ¹⁾	3.0, 1.6, 1.2, 1.0, 0.7	R91305, R91165, R91125, R9100, R91072
Toeboard pin ¹⁾		T00143
Console alu ¹⁾	0.3, 0.5	R25030, R25051

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Console alu without standard spigot ¹⁾	0.5	C25050
Console steel ¹⁾	0.47, 0.24	109047, 109024
Aluminum railing post ¹⁾		R03000
Wall anchoring tubes steel ¹⁾	3.0, 1.5, 1.2, 1.0, 0.8,	T00240U, T00008U, T00054U, T00178U,
	0.6, 0.4	T00056U, T00053U, T00007U
Adjustable wall anchor tube steel ¹⁾	0.75 - 1.25, 0.5 - 0.85	T00199U, T00247U
Five bar plate with handle in alu	0.5 × 0.5, 0.7 × 0.5,	R75050, R75070,
1)	1.1 × 0.5, 1.14 × 0.64,	R75110, R75114,
	0.7 × 0.32	R75032
Suspension clamp double ¹⁾		T00078
Suspension Grating ¹⁾		T00086
Suspension ¹⁾	H 80-180, H 150-300,	T00087, T00122,
	L 60-120	T00123
Suspension bulb ¹⁾	160-240, 260-370	T00257, T00282

¹⁾ Included in type-examination certificate C900133

Other accessories: Benzelwire

Dimensions

Component	Dimensions (mm)
Railing for stairs steel	Ø32.0×2.0/40×10/30×6
Railing for stairs alu	Ø48.3×3.4/40×20×2/40×20×2
Railing post steel	Ø48.3×3.2
Aluminum railing post	Ø48.3×4.0
Top rail 1.0 m steel	Ø48.3×3.2/Ø32×2/40×30×2
Top rail 1.0 m alu	Ø48.3×4.0/Ø48.3×3.4/40×20×2
Foldable railing steel	Ø32×2/40×6
Foldable railing alu	Ø48.3×4.0/40×20×2/40×10

Conditions during use

- 1. Stair flights and resting planes may be loaded with a maximum of 1.0 kN/m² distributed load at 10 m height, or a point load of 1.5 kN in the most unfavourable position.
- 2. For simplified dimensioning, a permissible standard load of 14.7 kN may be applied, provided that the other applicable conditions below are met. In the case of simplified design using the partial coefficient method, the design load capacity is obtained by multiplying the permissible spiral load by 1.5.
- 3. Clear headroom between working areas shall normally correspond to height class H2, which means headroom of at least 1.90 m between working areas and transom, or between working areas and ledger when using brackets to widen the scaffold. The headroom between the working areas and any horizontal diagonal brace shall be at least 1.90 m regardless of height class.
- 4. The stair tower shall be anchored to the wall with a vertical distance of 2 m between the wall brackets. They shall be connected to both the inner and outer standards of both standard pairs.
- 5. The maximum design anchorage forces in the wall ties are 1.7 kN and 2.3 kN parallel and perpendicular to the facade respectively.

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- 6. The maximum dimensional force on the foundation is 22 kN/standard.
- 7. Stairways shall be mounted with handrails on the inside and the stair tower with guardrails around the entire stair tower at all resting levels.
- 8. Longitudinal beams, transverse beams, vertical diagonal braces in the vertical plane furthest from the facade and 2-conductor guardrail frames shall be provided at all resting levels.
- 9. Hop-up brackets can be used against adjacent structure at the exit of the stair tower. Brackets covering an opening between the adjacent structure and the stair tower up to 0.5 m are allowed to be used. If the opening is larger than 0.3 m, the passage must be secured with guardrails.
- 10. Stair towers adjacent to a facade scaffolding or other structure are always installed with the direction of travel of the stairs parallel to the facade/structure. When placed perpendicular to the facade, the outer short side must be diagonally braced.
- 11. The maximum extended length of the base jack is 0.5 m.
- 12. System-independent components, such as tube couplers used, shall be type-examined.
- 13. During the type-examination, the assembly instructions edition 2022-02 in Swedish have been examined.

Assembly instructions

The stair tower must be accompanied by the assembly instructions when it is handed over to the user.

Application

The type-examination certificate applies to the stair tower produced by the manufacturer specified on the type-examination certificate using materials, dimensions and designs matching those of the type-controlled example.

The stair tower may not be assembled using components from other scaffolds unless a specific analysis of the resulting load capacity has been conducted.

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