N25(210) Permanent access and safety equipment

210 GUIDED TYPE FALL ARREST SYSTEM FOR ROOF MAINTENANCE ACCESS

.

BETTERSAFE INTERNATIONAL

FallAngel PROTECTION SYSTEMS

Roof Angel

Horizontal Lifeline System

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SYSTEM REFERENCE: ROOF ANGEL

- Anchorage device: Roof Angel Anchor Post for mechanical attachment to the top skin of the profile using 12 No. 6 or 8mm Rivets, toggle bolts, chemical anchors, mechanical anchors or 4 Standing Seam Clamps per post.
- Overall system length: To comprise the roof perimeter and single runs to allow access to gutters, roof light cleaning and roof inspection.
- Intermediate support spacing: Maximum 15m - as designed by the Bettersafe International Fall Angel approved installer to meet the requirements of the Roof Angel design software.
- Accessories/ Other requirements: As required to complete installation.
- Installation: To BS 7883 by the system manufacturer or a contractor approved by the system manufacturer.
- Structural anchors: Type recommended by the system manufacturer to suit the structure/ fabric into which they will be fixed.

DESIGN/ PERFORMANCE REQUIREMENTS

420 WIND LOADING
- General: Design the access/ safety system to withstand specified wind loads with equipment in position of maximum exposure and in parked position.
- Wind loads: As advised by Structural Engineer.

430 SAFETY
- General: The equipment as installed must have no irregularities/ projections capable of inflicting personal injury.
- Finished surfaces and edges of all accessible parts: Regular and smooth.

440 DESIGN LIFE/ MAINTENANCE PROGRAMME
- Design life of access/ safety system: Not less than the manufacturers recommended number of years.
- Schedule for maintenance and for replacement of components: Submit.

460 ASSESSMENT/ TESTING OF FIXING POINTS FOR ANCHOR DEVICES
- Design and installation of fixings in steelwork or timber: Verified by calculation to be capable of sustaining the relevant static and dynamic test forces specified in BS EN 795, clause 4.3.
- Fixings in other materials: Verify suitability by carrying out a test in a sample of the material. The sample must be capable of sustaining the relevant static and dynamic test forces specified in BS EN 795, clause 4.3. Thereafter, each structural anchor installed in that material must be subjected to an axial pull out force of 6kN to confirm the soundness of the fixing in accordance with BS 7883:2005 11.1.2. The structural anchor must sustain the force for a minimum of 15 seconds.

FABRICATION, ASSEMBLY AND INSTALLATION

510 FABRICATION AND ASSEMBLY GENERALLY
- Machine cutting, drilling and assembly: Carry out as much as possible in the workshop. Obtain approval for any reassembly on site.

520 PROTECTION
- General: Do not deliver to site any components or assemblies that cannot be installed immediately or unloaded into a suitable well protected storage area.

530 SUITABILITY OF STRUCTURE / FABRIC
- Visual and geometric survey of supporting structure and fabric: Carry out before commencing installation of access/ safety system. Report immediately if structure/ fabric will not allow required accuracy/ security of erection/ fixing.

540 MECHANICAL FIXINGS
- Materials: Unless otherwise recommended by equipment manufacturer:
    - Connecting bolts and other fixings fully accessible for inspection: A4 Stainless Steel unless otherwise specified or supplied by the manufacturer
    - Cast-in anchors and other fixings not accessible for routine inspection: Austenitic stainless steel, grade 1.4401 (316) to BS EN 10088-1.

550 FASTENERS, INSERTS AND BOLTS FOR BUILDING IN
- Supplier: Equipment manufacturer/ supplier.

820 OPERATING INSTRUCTIONS
- Equipment and accessories: Where appropriate, mark in such a way that it is possible to identify the correct mode of operation for their safe use.

830 OPERATING AND MAINTENANCE MANUAL

- General: Provide, for inclusion in the Building Manual, printed instructions and recommended procedures to be established by the Employer for operating and routinely maintaining the equipment. Provide diagrams where appropriate.
- Content:
    - Instructions for assembling/ erecting equipment for use.
    - Comprehensive operating instructions, including safety and emergency procedures, for all motions including upward, downward and lateral travel, and slew.
    - Servicing and planned maintenance procedures, including assembly instructions where maintenance necessitates dismantling of machinery parts.
    - List of replacement parts, with references.
    - Recommended procedures for testing equipment.

840 AS INSTALLED DRAWINGS

- General: After commissioning/ testing of the equipment provide as installed drawings for inclusion in the Building Manual.
- Drawing content:
    - Contractor's name and contract number.
    - Location and date of installation.
    - Manufacturer's name, model and type numbers.
    - General arrangement of the complete installation.