

Allukemi Step™

Manufacturer's Installation Instructions

Table of Contents.

1. Introduction	Page	3	6. References	Page	17
1.1 From the designer to the consumer			6.1 Manufacturer's Instructions		
2. Important warnings	Page	4	6.2 Regulations		
3. Technical information	Page	5	6.2.1 Technical standards		
3.1 Product description			6.2.2 National regulations		
3.2 Functional diagram			6.2.3 Local regulations		
3.3 Supports			6.3 Internet Sites		
3.4 System			10. Manufacturer and Distributor	Page	18
3.5 Description of components			10.1 Manufacturer		
4. Assembly	Page	11	10.2 Distributor		
4.1 Recommendations					
4.2 Assemblers					
4.3 Assembly kit					
4.4 Movement and storage					
4.5 Stages					
5. Guarantees	Page	15			
5.1 Duration					
5.2 Exclusion					
5.3 Limitations					
5.4 Responsibilities					
5.5 Renewal					
5.6 Testing and maintenance					
5.7 Jurisdiction					

1. Introduction.

Preventive and protective measures should be installed for works performed in places exposed to a danger of falls, in order to allow the operator to perform maintenance operations to move easily along the work area.

These protective devices, in addition to being safe, must be ergonomic, or rather “comfortable” to use for the operator, and they must be provided in the Technical Coverage Report (ETC) that is drawn up by the Health & Safety Coordinator at the design phase (CSP), in agreement with the designer, and be an integral part of the project both of the technical dossier and of the works. The ETC is therefore composed of various documents, with relevance to different subjects, in particular:

- **Coordinator/technician:** graphics with routes and access points to the roofing highlighted, technical report with adopted design solutions, structure support and mounting calculation report.
- **Manufacturer:** product certification, Manufacturer Instructions - Manual of installation, use and maintenance.
- **Installer:** declaration of conformity of the works performed.

From the designer to the consumer

1.1

With regard to the points mentioned above, the objectives of **Genesi Italia** are to create a direct line between the designer of the system and the final user, passing by the manufacturer and installer by means of:

- Study of the line through software with immediately understandable graphical interface and return of the elements that constitute the system (as an alternative to consultancy from our technical office).
- Supply of the elements provided for the entire system directly from **Genesi Italia** or from the chain of Partners and authorised resellers.
- Installation with simple procedures according to the Installation Manual by installers trained by Genesi Italia (subject of this document).
- Provision of information necessary for the proper use and maintenance contained in the Manufacturer's Instructions.

2. Important warnings.

Before system use, read the Manufacturer's Instructions - Use and Maintenance

- All users must be trained and informed about risks and must have carried out the training on 3rd category PPE.
- Users must be in optimal physical conditions for the duration of works.
- Operators must be trained and informed about emergency, recovery and evacuation procedures in the work area in which they operate.
- It is forbidden to make changes and/or additions to the equipment/system without the consent from the manufacturer/distributor.
- Equipment must not be used beyond its limitations or for purposes other than those foreseen.
- Before using the system, verify good equipment conditions as much as possible.
- For safety, it is imperative that use of equipment be suspended immediately in the event of doubts about their safe conditions or if they have been used for fall arrest. In both cases, before restarting operation, you must get written confirmation from a competent person stating that re-use of the system is acceptable.
- Periodic system review is mandatory.
Verify maintenance with the holder of the Technical File.

3. Technical information.

Product description

3.1

Railings are in compliance with standard EN ISO 14122-2 which includes permanent access safety devices to machinery with work platforms and passageways. The standard also applies to work platforms and passageways in the part of the building in which maintenance of said machinery must be performed, provided that the main function of said part of the building is to supply a means of access to the maintenance site. It is a collective protection system, so there is a maximum number of operators that can simultaneously access the protected area. The only constraint is that the area not be accessible to the public but only to maintenance personnel.

It is composed of aluminium extrusion components and is modular to achieve different widths. It is used whenever the roof or part of it cannot be walked on with direct application of a roof covering or special supports on the load-bearing structure. It must be mounted every 3 m. Minimum walkway width is 60 cm with the possibility, thanks to the rigidity of the side profile and the walkways, to reach up to 120 cm. It is also possible to further increase walkway width by coupling together multiple gangways. The gangway can be composed of a single walkway or integrated with an Allukemi Sky railing on one or both sides to bring the height of the side railing to 110 cm from floor level as provided by law. It can also be equipped with a special toe-clip board to protect both persons and materials from falls.

The gangway is therefore available in the following configurations:

ST01: Allukemi Step™ gangways with a single walkway

ST02: Allukemi Step™ gangway with railing on 1 side

ST03: Allukemi Step™ gangway with railing on 2 sides

ST04: Allukemi Step™ ladder-shaped gangway

ST05: Allukemi Step™ gangway for shed passage

Users must be in optimal physical conditions for the duration of works.

Before use, verify the presence of recovery and rescue floors or procedures in the plant location to be implemented in case of need.

The plant is guaranteed for 10 years with no annual maintenance requirement.

Below is a detailed description of the system.

Functional diagram

3.2

Gangway component configuration ST01

3.2.1

ST01 configuration gangways are made up of a single walkway composed of:

- Side profile art. STL
- Walkway surface art. STP
- Gangways are always delivered mounted in 3/6 m rods with 2 side profiles and walkway surfaces mounted to them.



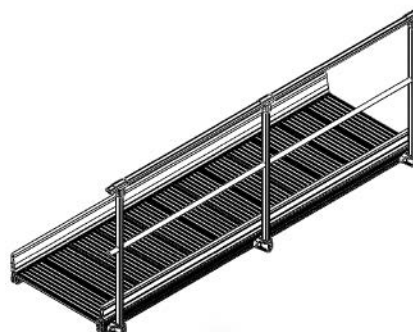
Components of gangway configurations ST02, ST03, ST04, ST05

3.2.2

In configurations ST02, ST03, ST04, ST05, gangways are also composed of railings and toe-clip boards.

- Allukemi Sky™ railing (for features and installation refer to the relative Manufacturer's Instructions)
- Toe-clip board art. STF

ST02



Supports

3.3

Supports are to be assessed depending on the roof structure. They include mounting brackets and junctions which can be attached to the side profile of the gangway with M12x40 hex head screws.

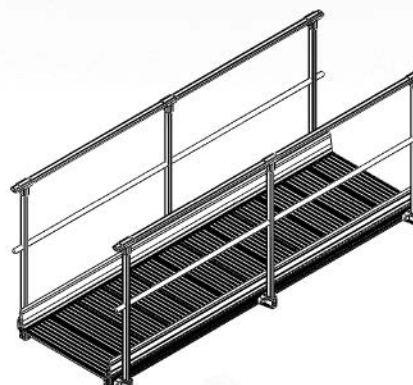
System

3.4

Other elements used in addition to specific gangway components used for closing the system and its identification:

- Mandatory sign art. CA00 in the vicinity of every access point
- Identifier seal art. C35

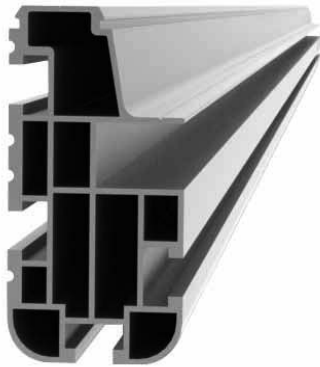
ST03



Description of components^{3.5}

Side profile art. STL

Side profiles are used to contain the walkway surfaces, allow for gangway mounting to the structure with special supports and **Allukemi Sky™** railing where necessary.



Material:

aluminium extrusion 6060-T6

Geometry:

maximum dimensions 60x120 mm in 3/6 m rods

Weight:

4.20 Kg/m

Mounting:

With 2 M12x40 hex head screws with nut and washer in the external hollow for middle mounting.

With 4 M12x40 hex head screws with nut and washer in the external hollow for junction mountings.

Equipment:

22 mm high grooving for walkway surface housing

4 hollow areas (2 external for mounting gangway supports and for Allukemi Sky™ railing mounting, 1 bottom, 1 internal) able to house M12 stainless steel hex head screws
special top housing for toe-clip board pressure mounting

Walkway surface art. STP

Walkway surfaces are used to create walkable paths for roofs.



Material:

aluminium alloy 6060-T6

Geometry:

section 250x21.5 mm

length from 630 mm to 1230 mm

Weight:

2.19 Kg/m

Mounting:

2 (1 per side) 4.8x31 mm self-tapping cylindrical convex screws

Equipment:

anti-slip knurling at the top + 2 T-braces at the bottom + 2 bendings at ends

Allukemi Sky™ railings

In configurations ST02, ST03, ST04, ST05 gangways are also composed of **Allukemi Sky™** railings (for features and installation refer to the relative Manufacturer's Instructions) to be mounted to the external bottom hollow area of the side profile.

Mounting:

2 M12 x 40 hex head screws with nut and washer in the external bottom hollow area.

Toe-clip board art. STF

Toe-clip boards are mounted in configurations with railings (ST02, ST03, ST04, ST05) to prevent material from falling over persons.



Material:

aluminium alloy 6060-T6

Geometry:

maximum dimensions 35x120 mm

Weight:

1.62 Kg/m

Mounting:

pressure mounting on side profile

Supports

Supports used for mounting gangways to structures can be of various geometries and must be calculated by the Genesi Italia Technical Department on a case by case basis to adapt to different structures.

Material:

316 stainless steel

Geometry:

variable

Mounting:

every 3 m

Sign art. CA00

The sign must be posted on every access point to the secured area.

CARTELLO IDENTIFICATIVO OBBLIGATORIO											
<input type="checkbox"/> Punto d'ancoraggio EN 795:2012 - TS16415 Tipo A <input type="checkbox"/> Linea vita orizzontale EN 795:2012 - TS16415 Tipo C <input type="checkbox"/> Binario orizzontale EN 795:2012 EN 795 - TS16415 Tipo D <input type="checkbox"/> Parapetto EN 14122-2:2007 <input type="checkbox"/> Passerella EN 14122-2:2010 <input type="checkbox"/> Binario verticale EN 353-1:2003 <input type="checkbox"/> Scala EN 353-1:2003 <input type="checkbox"/> Linea vita verticale EN 353-1:2003											
Tipo _____ N. massimo di lavoratori connessi _____ Tirante d'aria _____ Piombo n. _____ Data entrata in servizio _____											
Produttori <input type="checkbox"/> Scomin <input type="checkbox"/> F.I.S.A. <input type="checkbox"/> FALLPROTEC	Installatore _____										
Manutenzioni <table border="1"> <tr> <td>___/20___</td> <td>___/20___</td> <td>___/20___</td> <td>___/20___</td> <td>___/20___</td> </tr> <tr> <td>___/20___</td> <td>___/20___</td> <td>___/20___</td> <td>___/20___</td> <td>___/20___</td> </tr> </table>		___/20___	___/20___	___/20___	___/20___	___/20___	___/20___	___/20___	___/20___	___/20___	___/20___
___/20___	___/20___	___/20___	___/20___	___/20___							
___/20___	___/20___	___/20___	___/20___	___/20___							

Material:

PVC

Installation:

with every access

Contents:

type of system, serial number, date of entry into service of the system, manufacturer name, distributor name, reseller name, installer name

Identifier seal art. C35

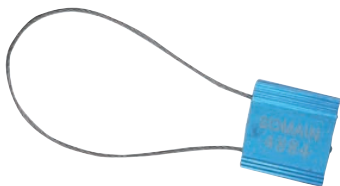
Identifier seals are unique for each system and must be positioned at the end of the same. The numbering is the same as reported on the sign described above and in the certification that accompanies the system

Installation:

at the end of each line

Contents:

serial number



Self-drilling screws 4.8 x 31 mm

4.8x31 mm self-drilling convex screws are used to mount walkway extrusions to the side profiles of gangways.



Type:

SA3/24-26-4.8x31

Material:

A2 stainless steel

Dimensions:

4.8x31 mm

Mounting:

with insert SR2 or insert PH1

M12 x 40 hex head screw

M12x50 mm hex head screws are used to mount lateral profiles of gangways to supports and to mount Allukemi Sky™ railings to gangways.

Composition:

M12x40 hex head screw

flat washer

nut

Material:

A2 stainless steel

Tightening:

70 Nm

4. Assembly

Recommendations: 4.1

Before fitting, a site inspection is recommended to ascertain the real situation of the area on which the system is to be mounted and to check for compliance with the planimetric report of the roof within which all the elements of the system are highlighted.

Installation must be carried out in compliance with the measures for the prevention of accidents in accordance with Legislative Decree 81/2008 - Consolidated Text on Health and Safety and on that indicated by the reference standard EN ISO 14122-2.

Assemblers: 4.2

Installation of **Allukemi Step™** gangways includes the training of installers by an in-house technician to put into practice the correct methods for assembly.

The fitters affiliated to the partners of Genesi Italia are obliged to draw up their own Risk Assessment Document (DVR) from which the risks linked to the fitting of the system and the counter-measures adopted to reduce the likelihood of this happening are drawn.

Assembly kit: 4.3

The main work equipment to perform correct installation:

- starter
- insert SR2 or PH1 for self-tapping screws
- hand tools (pliers, various wrenches)
- bush for M12 nuts

Movement and storage: 4.4

Extreme caution is recommended during the handling and storage of all the components of the system to avoid creating problems of corrosion. All the components are under 25 kg, maximum weight allowed for the manual handling of loads by a single operator.

When the weight of the components, especially of special supports, exceeds this value, movement with two operators or crane must be performed. These operations are also an integral part of the DVR.

Stages: 4.5

The phases described in this chapter are valid for the mounting of the pure line into the desired position and must be carried out in complete safety, thus complying with the instructions contained in the Safety Operational Plan (SOP) drawn up by the installer, in conformity with the Safety and Coordination Plan (SCP) drawn up by the Safety Coordinator at the Design phase (SCD) or by the Security Coordinator during the Implementation stage (SCI) where these two figures are present.

The steps of installation of this system shall be construed as excluding all those operations that are used to prepare the work area or to access the same.

Support mounting

4.5.1

The first procedure is to mount the supports on the structure at a distance of 3 m. Supports can be junctions to restore continuity of the two consecutive gangway rods or simple for middle mounting of 6 m rods. They can be of various geometries and must be calculated by the Genesi Italia Technical Department on a case by case basis.



Gangway mounting

4.5.2

- insert 1 (2 if junction support) M12x40 mm hex head screws in the top external hollow area and 1 (2) screw in the bottom area of the side profile on each support
- insert the gangway in the corresponding support bracket
- insert the flat washer and nut on the screw and tighten with torque 70 Nm

Note: Middle supports require two M12 fastening screws while junction supports require 4 M12 screws. Before permanently mounting profiles, insert all necessary screws in the hollow area.

Railing mounting

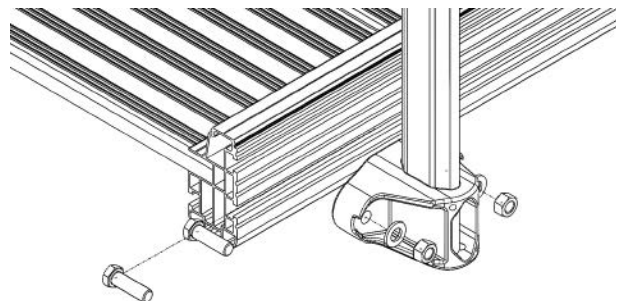
4.5.3

In configurations ST02, ST03, ST04, ST05, gangways are also composed railings to be mounted to the external hollow areas of the side profile as follows:

- insert 2 M12x40 mm hex head screws in the bottom external hollow for each gangway base, keeping in mind that these should be mounted every 150 cm
- insert universal base art. SKU
- insert flat washers and nuts and tighten to torque 70 Nm

Note: before permanently mounting profiles to mounting brackets, insert all screws necessary for railing mounting in the hollow areas.

Note: for railing mounting refer to the Allukemi Sky™ railing Manufacturer's Installation Instructions.

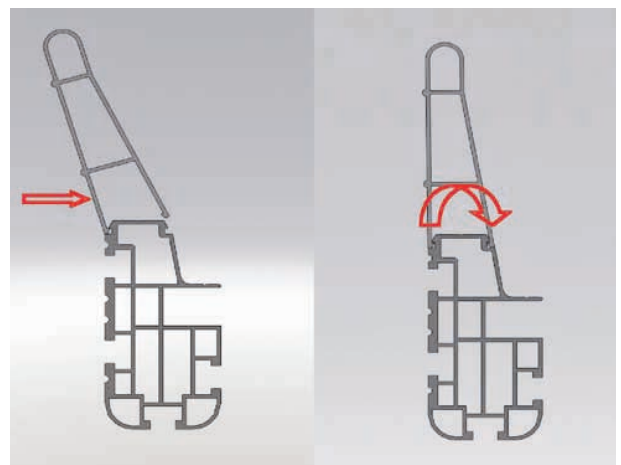


Toe-clip board mounting

4.5.4

Proceed as shown in the figure:

- have the external hook of the toe-clip board adhere to the side profile of the gangway
- with an inward pressure movement, fit in the internal hook



System sealing 4.5.5

System sealing consists of positioning the tamper-proof seal with the identifier seal art. C35 in the following manner:

insert the identifier seal near the gangway access point.

Sign installation 4.5.6

Closing of assembly is completed with installation of the sign art. CA00, mandatory at each access point, displaying the information described above.

CARTELLLO IDENTIFICATIVO OBBLIGATORIO

☐ Punto d'ancoraggio EN 795:2012 -TS16415 Tipo A

☐ Linea vita orizzontale EN 795:2012 -TS16415 Tipo C

☐ Binario orizzontale EN 795:2012 EN 795 -TS16415 Tipo D

☐ Parapetto EN 14122-3:2007

☐ Passerella EN 14122-2:2010

☐ Binario verticale EN 353-1:2003

☐ Scala EN 353-1:2003

☐ Linea vita verticale EN 353-1:2003

Tipo _____

N. massimo di lavoratori connessi _____

Tirante d'aria _____

Piombo n. _____

Data entrata in servizio _____

Produttori

☐ 

☐ 

☐ 

Installatore

Manutenzioni

___/20___	___/20___	___/20___	___/20___	___/20___
___/20___	___/20___	___/20___	___/20___	___/20___

5. Guarantees

Duration

5.1

A 10 year guarantee is given from the date of the delivery note on all stainless steel pieces making up the **Allukemi Step™** system.

Exclusion

5.2

The guarantee will only be granted if:

- the material was installed and has been used in accordance with the installation instructions and the technical instructions of Genesi Italia

The guarantee will not be granted in cases where:

- the products are made from galvanised or zinc plated steel
- safety products include parts or accessories of external origin

The guarantee is excluded when the defect is caused:

- by an intervention or a change made to the original system without the written permission of the manufacturer/distributor
- by use that is irregular or that does not conform to the intended use of the equipment
- by defective installation not in compliance with drawings or to good engineering practice, by the lack of communication by the customer of special conditions (pollution, temperature, number of users, etc.) regarding equipment use by an underestimation of support

resistance generating the destruction or non-compliance of our equipment

- by the adding to our systems of parts produced by the buyer or from other sources other than Genesi Italia. All our life lines must be sourced from Genesi or manufactured with our consent, on the basis of our designs
- by an event of force majeure or any event outside the control of the seller such as wars, lightning, etc.

Limitations

5.3

In all cases our guarantee is limited to the replacement or repair of elements or equipment that are formally recognised as defective by our technical service.

If the repair is entrusted to a third party, this can only be performed after acceptance by Genesi Italia of the repair quote.

Any returning of equipment must be undertaken with the consent of Genesi Italia.

The guarantee only applies to elements returned and as such does not include the costs of removal and re-installation of the equipment in the group in which it is integrated.

The repair, replacement or modification of parts or equipment during the guarantee period can determine extension of the guarantee.

Responsibility

5.4

Genesi Italia will be responsible, under the conditions of common law, for the material damage caused by your equipment or by your personnel.

Repair of the material damage attributable to the seller is expressly limited to a sum that does not exceed the value of the equipment in question. subject of the order.

By express convention, the seller and the customer mutually waive requiring the repair of the indirect and intangible damage of any kind, such as operating losses, loss of earnings, costs of delay, reminder, removal and reinstallation of the equipment, loss of future contracts, etc.

Renewal

5.5

This guarantee of 10 years may be renewed at the request of the customer, after a technical inspection carried out, upon payment, by our services of the equipment installed.

Testing and maintenance

5.6

As far as possible, before each use, perform a visual examination of the components of the system.

In case of doubt, ask the installing company or a maintenance engineer, authorised and responsible for this type of intervention, for an inspection.

Allukemi Step™ systems do not require maintenance. Should this be deemed necessary there is the option of this annual maintenance being performed by one of our staff authorised and qualified for this type of intervention.

In the event of a fall the system shall be the subject of necessary maintenance by a competent and qualified technician for this type of operation.

Jurisdiction

5.7

The applicable law is Italian legislation and the place of jurisdiction is in Bergamo (Italy) that will have exclusive jurisdiction over any dispute arising out of, or in some way related to, the products covered by this Manufacturer's Instructions.

6. References.

Manufacturer's Instructions

6.1

Manufacturer's Instructions - Maintenance

Regulations

6.2

Technical standards

6.2.1

EN ISO 14122-2:2010

Permanent means of access to machinery – Safety of machinery – Work platforms and passageways.

National regulations

6.2.2

Legislative decree 81/2008 and subsequent additions and modifications

Consolidated text on health & safety

Local regulations

6.2.3

Circ. 4 /SAN/2004 of the Lombardy Region

Update of Title III of the Local Regulations of Hygiene, transposition of the integration to Title III of the Regional Hygiene Law drawn up by the ASL of Bergamo

Decree of the President of the Regional Executive no. 62 of 23.11.2005 of the Region of Tuscany

Implementing regulation of art. 82, paragraph 16 of Regional Law no. 1 of the 03.01.2005 relating to the technical instructions on preventive and protective measures for the access, transit and execution of works at height in conditions of safety

Decree of the president of the province no. 7-114/ Leg. of 25.02.2008 of the Province of Trento

Technical regulations for the prevention of accidents as a result of falls from heights during routine maintenance on roofs

Decree of the Regional Government no. 2774 of 22.09.2009 in the Region of Veneto

Technical instructions on preventive and protective measures to be implemented in buildings for the access, transit and execution of maintenance works at height in conditions of safety

Regional law no. 5 of 15.02.2010 of the Region of Liguria

Rules for the prevention of falls from heights on construction sites

Decree of the Regional Government no. 1284 of 28.10.2011 in the Region of Umbria

Approval guidelines for the prevention of falls from heights

Internet sites

6.3

www.genesibesafe.com

Official site of the exclusive distributing company

www.uni.com

Italian national site of unification

7. Manufacturer and Distributor.

Manufacturer

7.1

Fisa srl
via Donizetti, 109/111
24030 - Brembate di Sopra - Bg

Distributor

7.2

Genesi Italia
via Donizetti, 109/111
24030 - Brembate di Sopra - Bg



Genesi Italia

Via Donizetti, 109/111
24030 Brembate di Sopra
Bergamo - Italy

T. +39 035 0332049
F. +39 035 6220438
info@genesibesafe.com



genesibesafe.com

Genesi Italia, Be Safe