









## INTRODUCTION



## **Product description**

The SafetyPro greenSec is a fall protection system for flat roofs, especially for green roofs with up to 7° or 5° incline. SafetyPro greenSec is permanently secured by the roof layers and ensures the safety of people working at height, providing free movement around the post and along the stainless steel wire cable without the need to reattach.

\*greenSec-E, only in Germany

### **Legal requirements**

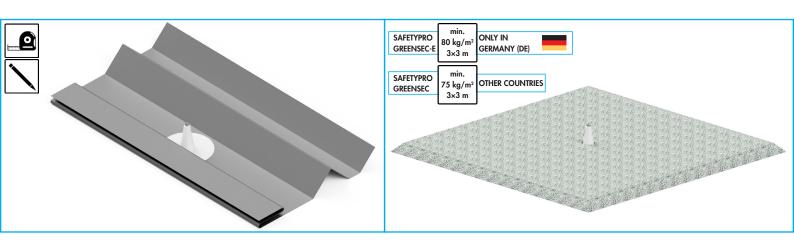
Anyone working at heights needs to be secured against fall. This is the responsibility of the employer, and/or the owner of the premises. It is also the architect's responsibility, in designing the building, to meet the relevant regulations. SafetyPro complies with the latest EU standards.

## **Advantages**

- Waterproofing layer remains intact as the system does not require any mechanical fixation to the roof structure
- Thermal bridge-free solution as fixation elements are not necessary for installation
- All system components are made of high quality corrosion resistant materials
- Simplified and reduced amount of components, same post for all positions, no additional corner elements
- Users have the maximum freedom of movement, the traveller slides freely along the cables and anchor posts
- Can be used with temporary cable as a horizontal lifeline system
- Ideal for building refurbisment, can be installed on already existing waterproofing without drilling the waterproofing membrane
- · Applicable for montainous regions with high snow fall possibility
- Easy reassembly after vandalism, misuse and unforeseen environmental damages
- Tested in accordance with European standards EN 795:2012 and CEN/TS 16415:2013



# **Installation** of SafetyPro greenSec anchor device, horizontal lifeline







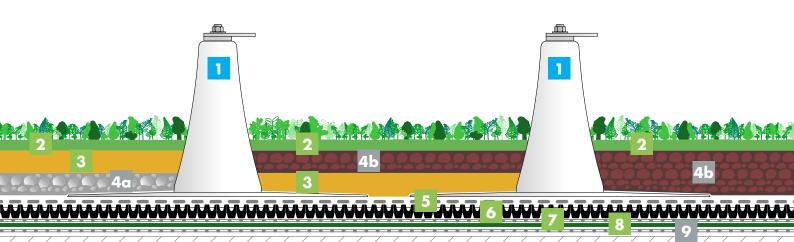








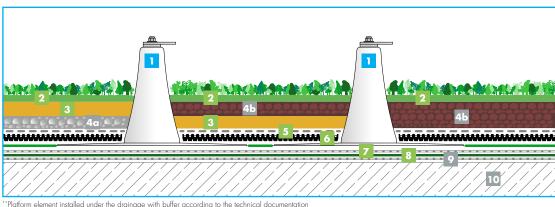
# **Build-up** of SafetyPro greenSec anchor device



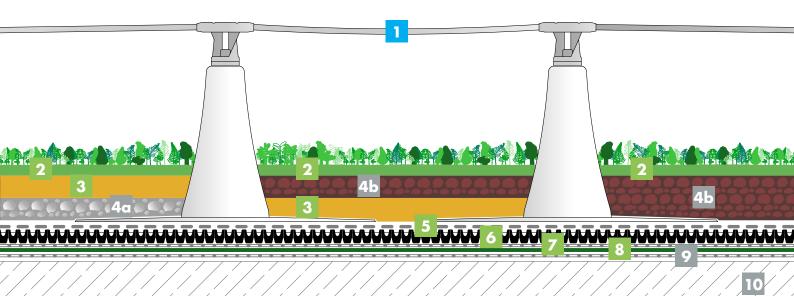
- SafetyPro greenSec anchor device
  - Urbanscape® Sedum-mix Blanket
    - Urbanscape® Green Roll
      - Ballast material (4a gravel, 4b substrate)
        - Urbanscape® Geotextile 110
          - Urbanscape® Drainage with buffer
            - Urbanscape® Geotextile 300-REC
              - 8 Urbanscape® Root Membrane USRM500\*
                - Waterproofing membrane
                  - 10 Roof base structure

\*Optional

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# **Build-up** of SafetyPro greenSec horizontal lifeline



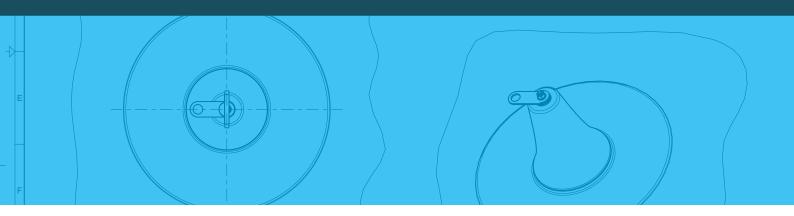
- SafetyPro greenSec horizontal lifeline
  - Urbanscape® Sedum-mix Blanket
    - Urbanscape® Green Roll
      - Ballast material (4a gravel, 4b substrate)
        - Urbanscape® Geotextile 110
          - 6 Urbanscape® Drainage with buffer
            - Urbanscape® Geotextile 300-REC
              - 8 Urbanscape® Root Membrane USRM500\*
                - Waterproofing membrane
                  - 10 Roof base structure

\*Optional





# COMPONENTS AND PROPERTIES





SafetyPro greenSec platform element



SafetyPro anchor device head and connector set



SafetyPro wire anchor head set

| Property                          | Unit   | Value                               |
|-----------------------------------|--------|-------------------------------------|
| Geotextile size                   | cm     | 300 × 300                           |
| Base disc diameter                | cm     | 55                                  |
| Maximum roof angle                | 0      | greenSec: 7<br>greenSec-E*: S       |
| Maximum post distance             | cm     | 750                                 |
| Material                          |        | composite sandwich, stainless steel |
| Maximum number of users           | person | 1+1                                 |
| Recommended roof layer weight     | kg/m²  | greenSec: 75<br>greenSec-E*: 80     |
| Minimum roof size                 | cm     | 450 × 450                           |
| Recommended distance to roof edge | m      | 2,5                                 |
| All dimensions are nominal        |        | *only in Germany                    |

## PLANNING AND SPECIFICATION

## **Planning principles**

The installation plan for the fall protection system is prepared by professionals, taking building characteristics and local conditions into consideration. Wherever possible, the plan should specify fall restraint systems to ensure that the user cannot move beyond the roof edge. Should building plans change during the design process or installation phase, professionals are recommended to approve the change. Among other key details, the plan must include:

- the exact placement of the system posts and components
- components to be installed
- the number of permitted users
- the permitted length of leash of the PPE

## **Requirements for planning**

- Roof plan with all the height measurements of the different rooftop surfaces, including all levels (i.e. rooftops, terraces, ground floor, parapet wall, superstructures)
- 2. Elevations and section drawings indicating the height levels
- 3. Inclination of the roof
- Placement of superstructures or elements on the roof that will be installed later
- 5. Layer build-up of the roofs
- 6. A dwg-formatted file of the drawings (which will speed up the planning process), or a pdf file, if a dwg is unavailable
- 7. Project details (country, address, project name, etc.)

#### **Specification**

#### SafetyPro greenSec-E [only in Germany (DE)]

SafetyPro greenSec-E fall restraint and fall protection system with CE marking for 1+1 users, tested according to standard CEN/TS 16415:2012 and EN795:2012, class "C" and "E", with ballasting geotextile including injected base disc, separate base stack for easy maintenance and later on repair possibility. All metal components made of stainless steel, with anchor point head set as a single point or with wire anchor head set as a lifeline system with hands-free traveller providing free movement along the stainless steel wire, with ballast material in dry conditions at 80 kg/m², distributed on the whole surface of the geotextile. System has to be installed according the guidelines and the plan of a professional. Supplied ready to install according to the approved implementation plan, to the technical building regulations and to the professional plan.

## SafetyPro greenSec [every European country except Germany (DE)]

SafetyPro greenSec fall restraint and fall protection system with CE marking for 1+1 users, tested according to standard CEN/TS 16415:2012 and EN795:2012, class "C" and "A", with ballasting geotextile including injected base disc, separate base stack for easy maintenance and later on repair possibility. All metal components made of stainless steel, with anchor point head set as a single point or with wire anchor head set as a lifeline system with hands-free traveller providing free movement along the stainless steel wire, with ballast material in dry conditions at 75 kg/m², distributed on the whole surface of the geotextile. System has to be installed according the guidelines and the plan of a professional. Supplied ready to install according to install according to the approved implementation plan, to the technical building regulations and to the professional plan.







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## COMPANY PROFILE

Knauf Insulation is one of the most respected names in the insulation industry worldwide with 30 years of experience and is still growing fast, with over 5,000 employees in more than 35 countries and more than 40 manufacturing sites. Being part of the family-owned Knauf Group Knauf Insulation Technical Solutions provides solutions for customers' requirements in industry, marine applications, heating, ventilation and air conditioning.

A profound market understanding and insulation know how enable us to provide a broad range of products to meet your specific needs.

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