



# System.



ofsafe anchors

Desde 1981 Fabricando seguridad GarsanSianor formación y protección laboral

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# Meeting the needs of todays changing work environment.

Workers lives are on the line everyday, but ensuring their safety starts long before their job starts.

At 3M Fall Protection we work hard to understand the challenges you face before we design your equipment. That's how we go beyond compliance to produce a broad and innovative range of high quality fall protection equipment for the world's most vital industries.

The 3M<sup>™</sup> DBI-SALA<sup>®</sup> RoofSafe Anchor and Cable System is a horizontal lifeline system that allows continuous uninterrupted access to all areas of a roof. It can span up to 15 m between anchors and provides continuous hands free access for users of the fall protection system. The system can be used for either work restraint or fall arrest and can be installed on standing seam, composite and built up roofing systems and multiple flat roofing and membrane roofing systems.

The RoofSafe anchor can also be used as a single point of anchor for maintenance tasks in localised areas.







## Contents.

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Product Overview	2
Features & Benefits	4 - 5
SpiraTech Force Management Technology	6
Applications Overview	7
Installation Examples	7
Working Safely at Height	8
System Components	9 - 14
Recommended 3M DBI-SALA Accessories	15



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# Features and benefits.

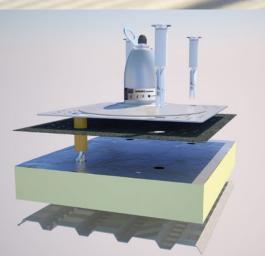
- The RoofSafe anchor is multi-directional and can activate and absorb energy no matter in which orientation the load is applied, which provides total freedom and flexibility in system design.
- The innovative energy absorbing system inside the RoofSafe anchor reduces the overturning moment on the fixings by half enabling the use of fewer fasteners in many circumstances. This reduces the number of roof penetrations and helps save time and money during installations.
- The toggle fixing method for flat roofing systems speeds up installation time and reduces thermal bridging, reducing heat loss from a building. Both of these features help save time and money for the customer.
- The RoofSafe anchor utilises marine grade alloys in its design to reduce the overall weight and save shipping costs. It has the additional benefit of being safer to move around the roof during installation.
- The RoofSafe anchor is modular in design, taking less space to pack and ship, again helping to reduce additional costs of installing a roof safety system. In the unlikely event that the anchor is deployed, it is possible to remove the top module and replace it with a new one.



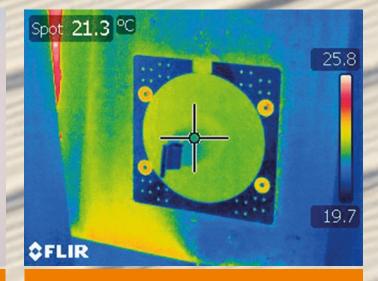


- The RoofSafe anchor has been designed so that a vertical pull test to 5 kN can be applied without affecting the anchors integrity. This enables annual test and verification of its structural integrity, ensuring compliance and peace of mind.
- The base plate designs incorporate multiple fixing options to help reduce the complexity of specification and in turn helps maximise inventory to ensure speedy delivery.
- The RoofSafe anchor for flat roofing systems has been designed to be easy to weather proof ensuring the integrity of the building envelope.
- The RoofSafe anchor looks smart and compliments modern building design, as well as fitting neatly with older buildings, enabling compliance and peace of mind no matter the type of project.
- The anchorage eye on the single point anchor product rotates to provide maximum functionality and safety in use.

- The RoofSafe Cable System uses high quality 316 stainless steel cable system offering excellent freedom of movement which helps the user to safely navigate corners and building contours.
- The system spans up to 15 m (49.2 ft) between intermediate supports, minimising roof penetrations.
- Electro polished components provide long-term corrosion resistance.\*
- System performance can be calculated using custom design software providing assured levels of safety. The system maintains a minimum safety factor of two for multiple users.
- The RoofSafe Anchor and Cable System conforms to EN795:2012, CEN/TS 16415, OSHA, AUS/NZ standards and has been tested to both EN795:2012 Type A and C standards.
- \* some aggressive environments can cause corrosion and discoloration of stainless steel



Toggle Fixing Method



**Reduced Thermal Bridging** 

# Ready to spring into action when you need it most.

The innovative RoofSafe Anchor Systems with SpiraTech Force Management Technology



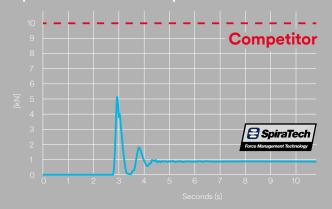
#### SpiraTech Force Management Technology.

In the event of a fall, the RoofSafe anchor breaks open, deploying the unique and patented SpiraTech Force Management Technology absorbing system, which reduces the forces generated on the roof structure to less than 5 kN, the lowest of any of its kind on the market.

This enables the anchor to be installed on a wide variety of old and new roof types with less risk to structural integrity.

#### Forces indicator: SpiraTech vs Competition.

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# Applications overview.

The RoofSafe anchor can be used to facilitate the installation of a horizontal lifeline system that allows continuous uninterrupted access to all areas of a roof or alternatively can be used as a single point of anchor for maintenance tasks in localised areas.

Roofs are changing to accommodate more insulation materials and being designed to utilise lighter materials and take advantage of new technologies. The advanced design of the RoofSafe anchor helps customers to benefit from modern roofing design whilst ensuring safety and structural integrity.

Additionally, as the desire to comply with health and safety regulations increases, the need for safety solutions on older building and structures increases. The RoofSafe Anchor and Cable System is ideally suited for installation on an older building that requires a fall protection system.

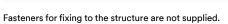


#### Installation examples.

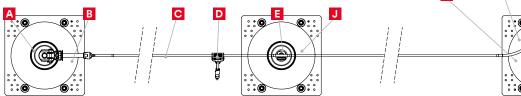
Α	RoofSafe Anchor System Eye & Pin	7241161
в	8 mm Hex Swage Tensioner 0.8 kN	7240166
С	8 mm 7 × 7 SS Cable Per M	7240211
D	8 mm UniGrab & Carabiner	7234020
E	8 mm Intermediate Bracket	7241412
F	8 mm 90 Degree Post Mount Corner	7241408
	8 mm 45 Degree Post Mount Corner	7241411*
	8 mm Variable Bracket	7241413*
G	8 mm Hex Swage Toggle	7234011
н	RoofSafe Anchor Baseplate 405 × 405 H	7241136
I	RoofSafe Anchor Module End / Corner Bitumen	7241143
J	RoofSafe Anchor Module Intermediate Bitumen	7241144



F



\*This component is different from the one illustrated





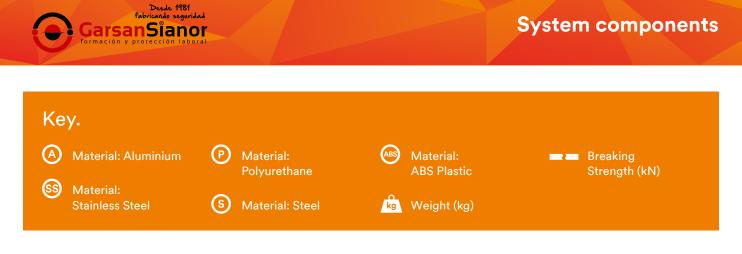
# Working safely at height.

One of the main causes of deaths and injuries at work is falling from height. When working at height is unavoidable and other means of protection are not possible, many rely on horizontal fall arrest systems.

This is especially important for people required to work in many aspects of building maintenance tasks on roofs, as they can be exposed to significant risks whilst carrying out their duties. Changes in weather, fragile roof elements, slips and trips, wind, steep inclines and slippery surfaces can all add to the dangers, so providing a safe system of work is essential, ensuring both compliance with regulations and the safety of employees and contractors.

The user attaches to the RoofSafe Anchor or Cable System via Personal Protection Equipment such as a harness and an energy absorbing lanyard. It is advised that, where possible, the Horizontal Life Line (HLL) system should be used for fall restraint as this stops the user being exposed to the fall hazard therefore reducing the risk. The RoofSafe Anchor and Cable System is typically installed by competent personnel who have been fully trained and authorised, with inspections every 12 months to ensure system integrity.

The RoofSafe Anchor and Cable System combined with good management controls provides a simple, yet comprehensive solution that will ensure compliance with current regulations in many circumstances.

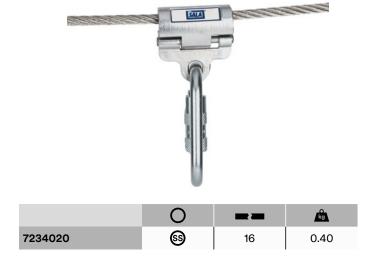


#### Traveller.

#### End fixings.

#### 8 mm UniGrab & Carabiner

#### 8 mm Hex Swage Tensioner 0.8 kN



C.	

	0		kg
7240166	65	38	0.80

#### End fixings.

8 mm Hex Swage Toggle



	0		kg
7234011	69	38	0.20

8 mm Hex Joiner



	0		kg
7234012	69	38	0.10

#### Post attachment points and brackets.

#### **RoofSafe Anchor Single Point Eye EMEA**

all Protection

#### RoofSafe Anchor System Eye & Pin

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	0		kg
7241167	69	26	0.10



	0		kg
7241161	69	>45	0.30

#### 8 mm Intermediate Bracket

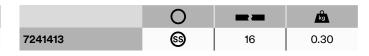


	0		kg
7241412	69	16	0.10

#### 8 mm 90 Degree Post Mount Corner

#### 8 mm Variable Bracket





#### 8 mm 45 Degree Post Mount Corner



	0		kg
7241408	69	19	0.40



	0		kg
7241411	65	19	0.30



#### **Baseplates.**

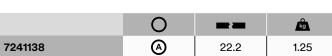
#### RoofSafe Anchor Baseplate 405 x 405 H



	0		kg
7241136	A	22.2	1.40

#### RoofSafe Anchor Baseplate 350 x 440 H





#### RoofSafe Anchor Baseplate 550 x 450 BL



	0		kg
7241140	A	22.2	2.10

#### RoofSafe Anchor Baseplate 405 x 405 BL



	0		kg
7241137	A	22.2	1.40

#### RoofSafe Anchor Baseplate 350 x 440 BL



	0		kg
7241139	A	22.2	1.30

#### Modules.

RoofSafe Anchor Module End/Corner Top Fix

Fall Protection



	0	kg
7241141	A 6 69	2.50

RoofSafe Anchor Module End / Corner Bitumen



	0	kg
7241143	A (5 65	2.80

#### RoofSafe Anchor Module End/Corner All Membrane



	0	kg
7241147	<b>ASS</b> ®	2.60

RoofSafe Anchor Module Intermediate Top Fix

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	0	kg
7241142	<b>A</b> SS	0.50

#### RoofSafe Anchor Module Intermediate Bitumen



	0	kg
7241144	A 3 69	0.80

#### RoofSafe Anchor Module Intermediate All Membrane



	0	kg
7241148	<b>ASS</b>	0.60

#### Modules.

RoofSafe Anchor Module End/Corner PVC

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#### **RoofSafe Anchor Module Intermediate PVC**

Ο

ASS

o kg

0.90



	0	kg	
7241145	ASS	2.90	

#### Built single point anchors.



7241146

Cable.

8 mm 7 x 7 SS Cable Per M





#### Bearer packs.

		0	kg
RoofSafe Anchor Rivertherm Bearer Pack	7241172	A	0.60
RoofSafe Anchor Speeddeck Bearer Pack	7241173	A	0.60
RoofSafe Anchor Tacdeck Bearer Pack	7241174	Ø	0.60
RoofSafe Anchor Standing Seam Bearer Pack 600 mm	7241175	A	0.60
RoofSafe Anchor Standing Seam Bearer Pack 1000 mm	7241236	Ø	0.60

#### Fixings & accessories.

RoofSafe Anchor Concrete Fixings 150 mm	7241180
RoofSafe Anchor Concrete Fixings 300 mm	7241181
RoofSafe Anchor Concrete Fixings 500 mm	7241279
RoofSafe Anchor Toggles 150 mm	7241182
RoofSafe Anchor Toggles 300 mm	7241183
RoofSafe Anchor Toggles 500 mm	7241280
RoofSafe Anchor 7.7 Rivet 100	7234005

RoofSafe Anchor 7.7 Rivet 500	7234006
RoofSafe Anchor Maxi Clamp Z x4	7241204
RoofSafe Anchor Maxi Clamp E x4	7241206
RoofSafe Anchor Maxi Clamp U x4	7241208
RoofSafe Anchor System Tag	7241232
RoofSafe Anchor Throw Plate	7241166



## Recommended 3M™ DBI-SALA® Accessories





Daily, thousands of people working at height are exposed to falls over or around edges. Those working on electrical pylons, steel fabrications, scaffolding, flat roof structures or telecoms towers today may be using shock absorbing lanyards that are not durable enough to withstand a fall across such a structure. 3M's answer to this is range of edge-tested lanyards under the DBI-SALA brand, that are designed to offer greater security to users exposed to falls over or around edges and tested rigorously over a 0.5 mm radius edge.

Single leg, with Aluminium Triple Lock Carabiner, 20 mm Gate Opening Body Connector and Aluminium Scaffold Hook, 60 mm Gate Opening Anchor Connector. 12 mm dia. Kernmantle rope leg material. Orange accenting thread indicates suitability for edge applications. Includes identification labels protected with transparent shock pack cover. CE EN355 Certified.



#### 3M™ DBI-SALA® Delta™ Harness (1112918)

Innovative body support for more than two decades.

Toughness. Versatility. These are qualities expected of you, so you should expect nothing less from your safety harness. Delta harnesses combine a number of innovations with popular features that have made an industry workhorse that's as tough as those who wear them. Delta harnesses have a shape of their own, so you can down them quickly and easily.

3M<sup>™</sup> DBI-SALA<sup>®</sup> Delta<sup>™</sup> Full-body Harness, size universal, for working at height as part of complete fall arrest system. Features large rear stand-up d-ring, no-tangle design, lanyard keepers, adjustable chest strap, quick-connect buckles on chest and legs, vertical torso adjusters eliminate loose ends and lock into place, adjustable leg straps, webbing management, contrasting leg and chest straps, fall indicator, covered identification labels. To be used as part of a complete fall arrest system. 140 kg weight capacity. CE EN361 Certified.

Only devices approved by 3M should be used on the 3M DBI-SALA RoofSafe Anchor & Cable System. This ensures the safety of your workforce, as many devices are not tested in conjunction with cable fall protection systems.

Your system integrator will advise you further on your equipment selection, including harnesses and training for your personnel for working safely at height.



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3M y Protecta pertenecen a 3M Company y sus empresas filiales. J435746

