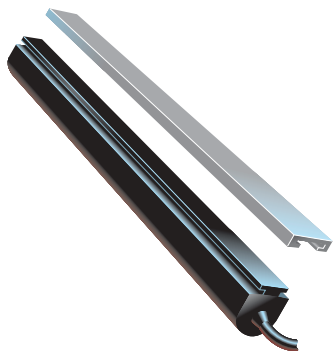


## Safety Edges Safedge™ Profiles



### Description

The ability of the Safedge profile to out perform competition lies in its innovative design. It uses a combination of non conductive rubber and flexible wire cored conductive rubber bonded together so it keeps bouncing back into shape even after repeated compressions.

The Safedge profiles come in 3 different cushions factors: 5mm (0.2in), 19mm (0.75in) and 41mm (1.6in). Cushion factor is the distance the profile can be depressed after a signal has been generated. The profiles are also offered with a sealing lip which is designed to reduce drafts between the profile and opposing surface.

The profiles come in two different materials. Use the EPDM material in the presence of conductive fluids. The NBR/CR material performs better in the presence of oils. Review the chemical resistance chart to help make the best choice of material. If in doubt, a small sample of the profile should be tested for chemical resistance before a final selection is made.

The Safedge profile has no rigid internal parts which can “break through” or cause fatigue failures after prolonged use. The multi-stranded copper wire core throughout the length of the strip insures that there are no problems of resistance build up on long lengths.

### Features

- Various profiles
- Conductive rubber technology
- Up to 50m lengths
- Aluminium, plastic or zinc coated steel, mounting rails
- Rubber boot optional
- Active corners
- Sealing lip available

### Specifications

Standards	EN1760-2, EN 954-1, ISO13849-1, IEC/EN60204-1, ANSI B11.19, AS 4024.5
Approvals	CE marked for all applicable directives, cULus and TÜV, c-tick not required
Power supply	Operates on 4V DC supplied from control unit
Operating temperature	EPDM material -5°C to +55°C (23°F to 131°F) NBR/CR material 0°C to + 55°C (32°F to 131°F)
Humidity	90% RH
Enclosure Protection	IP67 (NEMA 6P)
Conductor Size	(18AWG)
Materials	EPDM Ethylene Propylene Diene Modified Rubber NBR/CR Acrylonitrile (34% nitrile) Butadiene Rubber/Chloroprene Rubber
Mounting	Any position using Type C112 “C” rail
Weight	See Ordering Details

### Chemical Resistance of Safedge Profile

Substance	Resistance—“S” Profile EPDM	Resistance—“N” Profile NBR/CR
Acetic Acid (10%)	Good	Good
Acetone	Good	Fair
Ammonium Hydroxide (35%)	Good	Good
Benzene	Poor	Poor
Diesel Oil	Poor	Good
Ethyl Alcohol (Ethanol)	Good	Good
Hydrochloric Acid (10%)	Good	Good
Lubricating Oil	Poor	Good
Nitric Acid (10%)	Good	Fair
Petrol	Poor	Fair
Silicone Fluids	Good	Good
Sodium Chloride (25%)	Good	Good
Trichlorethylene	Good	Poor
Vegetable Oils (general)	Good	Good
Water (distilled)	Good	Good
Water (sea)	Good	Good

**Product Selection—Profiles**



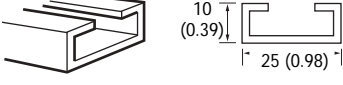
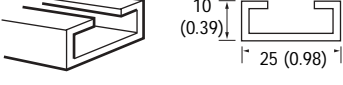
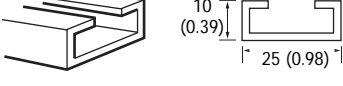
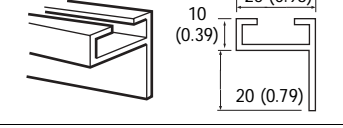
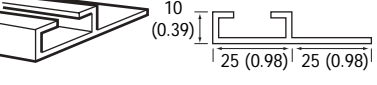
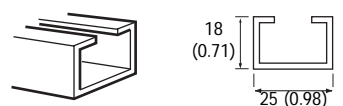
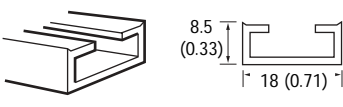
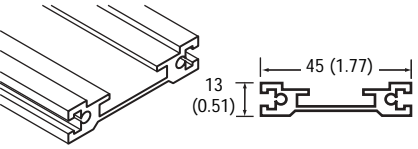
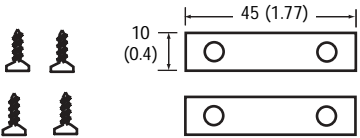
Code (Page 2-100)	Dimension	Profile	Description	Cushion Factor	Length— m (ft)	Catalogue Number
A		0110S	Black, EPDM, Weight: 463g/m (0.33lbs/ft)	5mm	5 (16.4)	440F-E0110S05
					10 (32.8)	440F-E0110S10
					20 (65.6)	440F-E0110S20
C		0110N	Black, NBR/CR, Weight: 460g/m (0.31lbs/ft)	5mm	5 (16.4)	440F-E0110N05
					10 (32.8)	440F-E0110N10
					20 (65.6)	440F-E0110N20
B		0110R	Red, EPDM, Weight: 502g/m (0.34lbs/ft)	5mm	5 (16.4)	440F-E0110R05
					10 (32.8)	440F-E0110R10
					20 (65.6)	440F-E0110R20
E		1610S	Black, EPDM, Weight: 843g/m (0.57lbs/ft)	19mm	5 (16.4)	440F-E1610S05
					10 (32.8)	440F-E1610S10
					20 (65.6)	440F-E1610S20
F		1610N	Black, NBR/CR, Weight: 837g/m (0.56lbs/ft)	19mm	5 (16.4)	440F-E1610N05
					10 (32.8)	440F-E1610N10
					20 (65.6)	440F-E1610N20
H		0310S	Black, EPDM, Weight: 1209g/m (0.81lbs/ft)	41mm	5 (16.4)	440F-E0310S05
					10 (32.8)	440F-E0310S10
					20 (65.6)	440F-E0310S20
D, J		0510S	Black, EPDM, with Sealing Lip Weight: 545g/m (0.37lbs/ft)	5mm	5 (16.4)	440F-E0510S05
					10 (32.8)	440F-E0510S10
					20 (65.6)	440F-E0510S20
G, K		0804S	Black, EPDM, with Sealing Lip Weight: 1013g/m (0.68lbs/ft)	19mm	5 (16.4)	440F-E0804S05
					10 (32.8)	440F-E0804S10
					20 (65.6)	440F-E0804S20

**Safety Edges**  
Safedge™ Profiles

**Product Selection—Profiles**

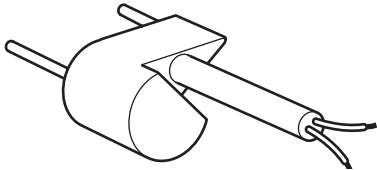
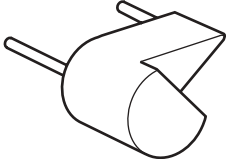
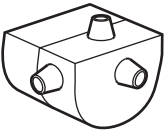
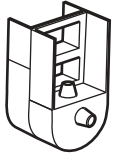
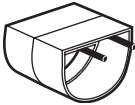
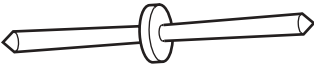




Code (Page 2-100)	Dimension	Profile	Description	Cushion Factor	Length— m (ft)	Catalogue Number
I, L		0210S	Black, EPDM, with Sealing Lip Weight: 1291g/m (0.87lbs/ft)	41mm (1.61in)	5 (16.4)	440F-E0210S05
					10 (32.8)	440F-E0210S10
					20 (65.6)	440F-E0210S20
M		0118S	Black, EPDM Weight: 242g/m (0.163lbs/ft)	3.75mm (0.15in)	5 (16.4)	440F-E0118S05
					10 (32.8)	440F-E0118S10
					20 (65.6)	440F-E0118S20
N, O		1111S	Black, EPDM Weight: 680g/m (0.457lbs/ft)	NA	5 (16.4)	440F-E1111S05
					10 (32.8)	440F-E1111S10
					20 (65.6)	440F-E1111S20

**Product Selection—“C” Rails**

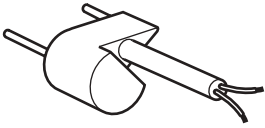
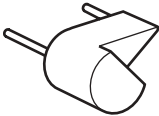
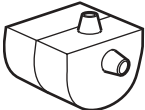
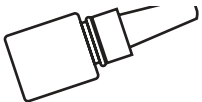
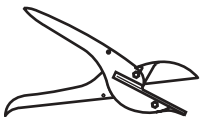
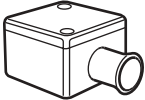

Code	Dimension—mm (inches)	Description	Catalogue Number
A		Aluminium type; Type C112/A Suitable for all profiles. 3m (9.8ft) length Weight: 258g/m (0.17lbs/ft)	440F-R1212
B		Zinc-Coated Steel; Type C112/S Suitable for all profiles 2m (6.5ft) length Weight: 663g/m (0.45lbs/ft)	440F-R1112
C		PVC Black; Type C112/PB Suitable for all profiles 3m (9.8ft) length Weight: 111g/m (0.07lbs/ft)	440F-R1212PB
D		PVC Red; Type C112/PR Suitable for all profiles 3m (9.8ft) length Weight: 111g/m (0.07lbs/ft)	440F-R1212PR
E		PVC Yellow; Type C112/PY Suitable for all profiles 3m (9.8ft) length Weight: 111g/m (0.07lbs/ft)	440F-R1212PY
F		Aluminium Vertical Lip; Type C112/A2 Suitable for all profiles 2m (6.5ft) length Weight: 368g/m (0.25lbs/ft)	440F-R1214
G		Aluminium Horizontal Lip; Type C112/A3 Suitable for all profiles 2m (6.5ft) length Weight: 388g/m (0.26lbs/ft)	440F-R1215
H		Aluminium Deep Channel; Type C112/A4 Suitable for all profiles 2m (6.5ft) length Weight: 345g/m (0.23lbs/ft)	440F-R1216
I		Aluminium; Suitable for Mini Profile Only 2m (6.5ft) length Weight: 150g/m (___lbs/ft)	440F-R1219
J		Aluminium Suitable for Rubber Boot Only ?m (ft) length Weight: 667g/m (0.448lbs/ft)	440F-R2151
NA		Aluminium End Plate for C-Rail Option J 2 Plates 4 Screws, flat head, Phillips, 10mm, #6, Weight: 7g (0.01lbs)	440F-R2152

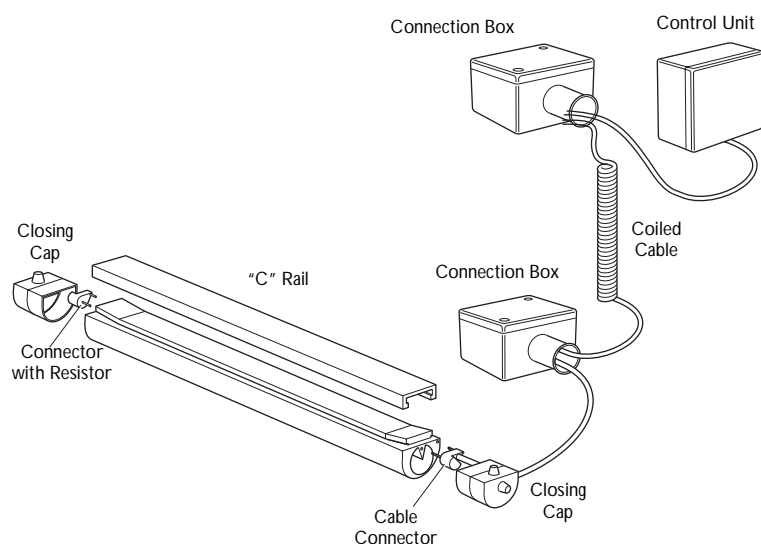
**Safety Edges**  
Safedge™ Profiles

**Product Selection—Component Parts**

Dimension	Name	Description	Catalogue Number
	Connector and Cable	1m	440F-A1301
		2m	440F-A1302
		5m	440F-A1305
		12m	440F-A1306
		15m	440F-A1307
	Terminator	6kΩ (yellow) resistor for series termination	440F-A1308
		15kΩ (blue) for parallel termination	440F-A1309
	Closing Cap	Closing Cap material: EPDM	440F-A1302S
		Closing Cap material: NRB	440F-A1302N
	Closing Cap	To close profiles 440F-E0310S and 440F-E1610S.	440F-A1303S
		To close profiles 440F-E1610N.	440F-A1303N
	Axial Connector	With this connector you can directly connect two profiles. Suitable for 440F-E0110S and 440F-E0110R profiles.	440F-A0061S
	Straight Pin Connector	Kit contains one pair of pins suitable for one joint.	440F-A0004
	90° Corner Connector	When using profile 440F-E0110S select	440F-A0071S
		When using profile 440F-E0110R select	440F-A0071S
		When using profile 440F-E0110N select	440F-A0071N
		When using profile 440F-E0310S select	440F-A0073S
		When using profile 440F-E1610S select	440F-A0074S
		When using profile 440F-E1610N select	440F-A0074N
	90° Corner Connector (vertical)	When using profile 440F-E0110N select	440F-A0072N
		When using profile 440F-E0110S or 440F-E0110R select	440F-A0072S
		When using profile 440F-E1610N select	440F-A0075N
		When using profile 440F-E1610S select	440F-A0075S
		When using profile 440F-E0310S select	440F-A0076S
	45° Corner Connector	When using profile 440F-E0110N	440F-A0071N45
	60° Corner Connector	When using profile 440F-E0110N	440F-A0071N60

**Product Selection—Component Parts**

Dimension	Name	Description	Catalogue Number
	Connector and Cable	Use only on Mini Profile—1m	440F-A1181
		Use only on Mini Profile—3m	440F-A1183
		Use only on Mini Profile—5m	440F-A1185
	Terminator	Use only on Mini Profile— 8kΩ (yellow) resistor for series termination	440F-A1186
	Closing Cap	Use only on Mini Profile— Closing Cap material: EPDM	440F-A1318
	Cyanocrylate Adhesive	Contents: 3g. Sufficient for approximately 10 terminations.	440F-A0020
	Shears	Use to cut profiles.	440F-A3084
	Connection Box	Polycarbonate housing 53mm X 53mm X 35mm complete with two pole terminal and trumpet type screw on connector with strain and relief clamp. For use with coiled cable	440F-A0116
	Coiled Connection Cable	2.5m (8.2ft) (extended) of flexible coiled cable.	440F-A2450
		3.5m (11.5ft) (extended) of flexible coiled cable.	440F-A2700



Example application of profile using coiled cable. The coiled cable can not be directly connected to the profile due to the weight of the cable. The proper use of the coiled cable is to connect the coiled cable to the profile through the connection box. The coiled cable should be secured to both the moving and stationary objects so as to prevent straining of the terminal connections.

# Safety Edges

## Safedge™ Profiles

### Factory Assembled Product Selection (standard profile)

**440F-E** **C** **A** **M** **V** **01270**  
*a* *b* *c* *d* *e*

*a*

Profile	
Code	Description
A	0110S
B	0110R
C	0110N
D	0510S with Sealing Lip on Right Side
E	1610S
F	1610N
G	0804S with Sealing Lip on Right Side
H	0310S
I	0210S with Sealing Lip on Right Side
J	0510S with Sealing Lip on Left Side
K	0804S with Sealing Lip on Left Side
L	0210S with Sealing Lip on Left Side
N	Rubber Boot over 0110S
O	Rubber Boot over 1610S

*b*

**"C" Rail**

Code	Description
A	1212 aluminium for "Profile" codes A-L
B	1112 zinc coated steel for "Profile" codes A-L
C	1212PB PVC black for "Profile" codes A-L
D	1212PR PVC red for "Profile" codes A-L
E	1212PY PVC yellow for "Profile" codes A-L
F	1214 aluminium with vertical lip for "Profile" codes A-L
G	1215 aluminium with horizontal lip for "Profile" codes A-L
H	1216 aluminium deep rail for "Profile" codes A-L
J	2151 aluminium for "Profile" codes N and O
N	No C-Rail (not needed)

*c*

**Cable Entrance**

Code	Description
A	LHT left entrance with 1m cable
B	LHT left entrance with 2m cable
C	LHT left entrance with 3m cable
D	LHT left entrance with 5m cable
E	LHT left entrance with 10m cable
F	RHT right entrance with 1m cable
G	RHT right entrance with 2m cable
H	RHT right entrance with 3m cable
I	RHT right entrance with 5m cable
J	RHT right entrance with 10m cable
K	SET straight entrance with 1m cable
L	SET straight entrance with 2m cable

*d (continued)*

**Cable Entrance**

Code	Description
J	RHT right entrance with 10m cable
K	SET straight entrance with 1m cable
L	SET straight entrance with 2m cable
M	SET straight entrance with 3m cable
N	SET straight entrance with 5m cable
O	SET straight entrance with 10m cable
P	UNDER entrance with 1m cable
Q	UNDER entrance with 2m cable
R	UNDER entrance with 3m cable
S	UNDER entrance with 5m cable
T	UNDER entrance with 10m cable

*e*

**Termination**

Code	Description
A	LHT left exit with 1m cable
B	LHT left exit with 2m cable
C	LHT left exit with 3m cable
D	LHT left exit with 5m cable
E	LHT left exit with 10m cable
F	RHT right exit with 1m cable
G	RHT right exit with 2m cable
H	RHT right exit with 3m cable
I	RHT right exit with 5m cable
J	RHT right exit with 10m cable
K	SET straight exit with 1m cable
L	SET straight exit with 2m cable
M	SET straight exit with 3m cable
N	SET straight exit with 5m cable
O	SET straight exit with 10m cable
P	UNDER exit with 1m cable
Q	UNDER exit with 2m cable
R	UNDER exit with 3m cable
S	UNDER exit with 5m cable
T	UNDER exit with 10m cable
U	Parallel Termination—15kΩ
V	Series Termination—6kΩ

*f*

**Length of Edge**

Code	Description
5 digit number	Enter length of edge in mm for example: 50m=50000; 500mm=00500 300mm minimum

❶ Order controller separately. See page 2-104 for selection details.

**Factory Assembled Product Selection**  
(mini-profile)



**440F-E** **ⓘ** M I M V 01270  
*a* *b* *c* *d* *e*

*a*

Profile	
Code	Description
M	0118S 3.75mm (0.15in) Cushion Factor Black, Mini Profile

*b*

"C" Rail	
Code	Description
I	1219 aluminium for "Profile" code M
N	No C-Rail (not needed)

*c*

Cable Entrance	
Code	Description
K	SET straight entrance 1m cable
M	SET straight entrance 3m cable
N	SET straight entrance 5m cable
P	UNDER entrance 1m cable
R	UNDER entrance 3m cable
S	UNDER entrance 5m cable

*d*

Termination	
Code	Description
K	SET straight entrance 1m cable
M	SET straight entrance 3m cable
N	SET straight entrance 5m cable
P	UNDER entrance 1m cable
R	UNDER entrance 3m cable
S	UNDER entrance 5m cable
V	Series Termination—8kΩ

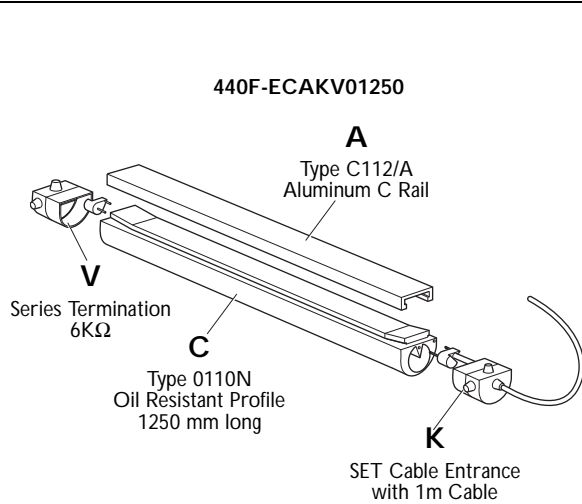
*e*

Length	
Code	Description
5 digit number	Enter length of edge in mm for example: 50m=50000; 500mm=00500 300mm minimum

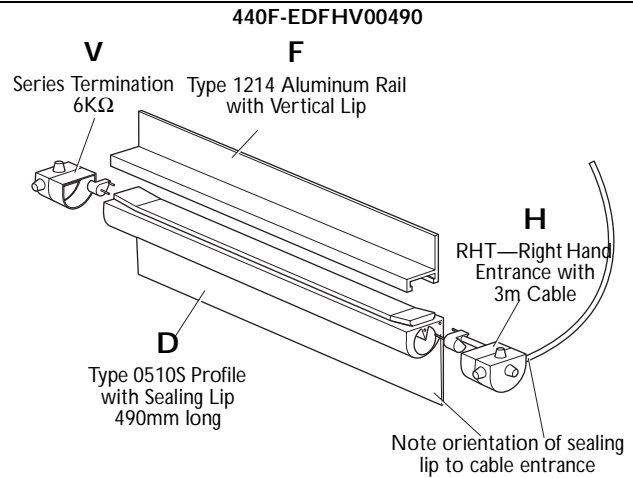
**ⓘ Order controller separately. See page 2-104 for selection details.**



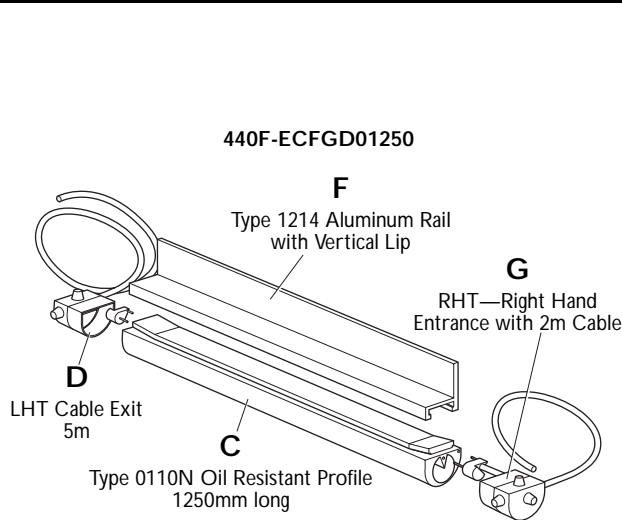
Factory Assembled Examples



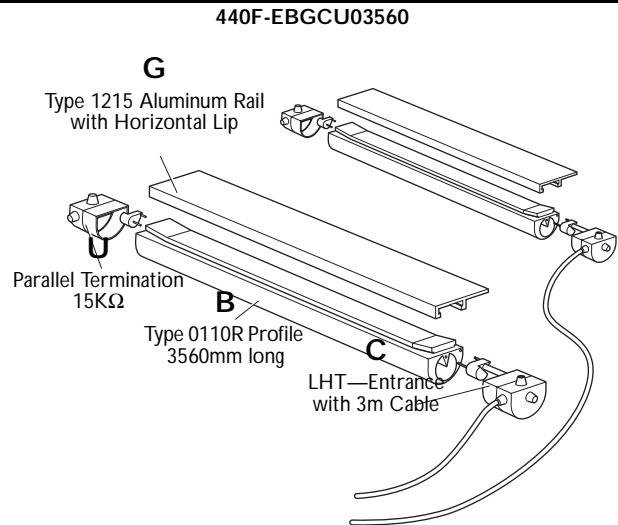
This is a single oil resistant profile which is 1250mm long. The edge is terminated with a Series Termination. A 1m cable enters straight into the closing cap from a DIN-rail mounted controller. The profile is mounted on a standard aluminium C rail.



This is single profile has a sealing lip and is 490mm long. The profile is terminated with a Series Termination. A 3m cable enters into the right hand side of the closing cap from a plastic surface mounted controller. The profile is mounted on an aluminium rail with a vertical lip for ease of mounting. The orientation of the sealing lip to the vertical lip can be reversed by the user by sliding the profile out of the C Rail, rotating the C Rail 180° and then re-inserting the profile back into the C Rail.



This is a single oil resistant profile which is 1250mm long. The edge is terminated with a 1m cable. A 1m cable enters straight into the closing cap. The profile is mounted on a standard aluminium C rail. A control unit is not included. This edge is intended to be used in series with another length of edge which has a terminating resistor.



This is a red-coloured single profile which is 3560mm long. This profile is part of a parallel profile system, for ease of mounting, as it is terminated with a Parallel Termination. A 3m cable enters into the left side of the closing cap from a plastic surface mount controller. The profile is mounted on an aluminium C Rail with a horizontal lip for ease of mounting. The horizontal lip can be reversed by the user by sliding the profile out of the C Rail, rotating the C Rail and then re-inserting the profile back into the C Rail. A separate catalogue number must be entered for the other profile.