



## Safety Guard Mats, Strips and Bumpers

**Completely flexible contact element!  
Durable! Will not rust or dent!  
Resists common oils and chemicals!**

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# Safe-T-Step Guard Mats

## Heavy Duty, Impact Resistant Safeguarding

For nearly two decades Jokab Safety has set the industry standards for quality and performance of industrial automation and machine safeguarding. We are proud to announce the latest addition to our product line—the Safe-T-Step impact-resistant, heavy-duty mat. Alumaglas® contact elements blanket the entire surface virtually eliminating any dead zones in the active surface. Our contact element will not rust or dent—and it is completely flexible, enabling it to withstand impacts that could damage other rigid contact elements. Every Safe-T-Step mat is available with a retainer trim kit made of extruded aluminum, which is recommended to surround the mat and secure it in place. The trim kits are available in straight or miter cut.



### Chemical Resistance

RESIST. LEVEL	CHEMICAL	RESIST. LEVEL	CHEMICAL	RESIST. LEVEL	CHEMICAL
<b>C</b>	Acetic Acid, Glacial	<b>U</b>	Diethyl Ether	<b>B</b>	Naphthalene
<b>B</b>	Acetic Acid, 30%	<b>U</b>	Dioxane	<b>U</b>	Nitric Acid (Conc.)
<b>C</b>	Acetic Anhydride	<b>U</b>	Ethyl Acetate	<b>A</b>	Nitric Acid (Dilute)
<b>U</b>	Acetone	<b>B</b>	Ethyl Alcohol	<b>U</b>	Nitric Acid (Red Fuming)
<b>A</b>	Ammonia Gas (Cold)	<b>A</b>	Ethyl Chloride	<b>U</b>	Nitrobenzene
<b>A</b>	Ammonium Carbonate	<b>U</b>	Ethylene Chloride	<b>B</b>	Octyl Alcohol
<b>A</b>	Ammonium Chloride	<b>A</b>	Ethylene Glycol	<b>B</b>	Oleic Acid
<b>A</b>	Ammonium Hydroxide	<b>U</b>	Ethylene Oxide	<b>A</b>	Oxalic Acid
<b>A</b>	Ammonium Nitrate	<b>A</b>	Ferric Chloride	<b>C</b>	Phenol Hydrazine
<b>A</b>	Ammonium Sulfate	<b>B</b>	Formic Acid	<b>A</b>	Phosphoric Acid (20%)
<b>U</b>	Aniline	<b>C</b>	Furfural	<b>A</b>	Phosphoric Acid (45%)
<b>A</b>	Aqua Regia	<b>A</b>	Gasoline	<b>U</b>	Phosphorous Trichloride
<b>C</b>	Benzoic Acid	<b>A</b>	Glycerin	<b>B</b>	Picric Acid
<b>A</b>	Boric Acid	<b>B</b>	Hexyl Alcohol	<b>A</b>	Potassium Dichromate
<b>U</b>	Bromine-Anhydrous	<b>A</b>	Hydrobromic Acid	<b>C</b>	Potassium Hydroxide
<b>U</b>	Bromine Water	<b>B*</b>	Hydrochloric Acid (Hot) 37%	<b>U</b>	Propylene Oxide
<b>U</b>	Bromobenzene	<b>B</b>	Hydrochloric Acid (Cold) 37%	<b>U</b>	Pyridine
<b>B</b>	Butter	<b>B*</b>	Hydrofluoric Acid (Conc.) Hot	<b>A</b>	Silver Nitrate
<b>B</b>	Butyl Alcohol	<b>B</b>	Hydrofluoric Acid (Conc.) Cold	<b>A</b>	Sodium Borate
<b>U</b>	Butyl Stearate	<b>A</b>	Hydrofluosilicic Acid	<b>A</b>	Sodium Cyanide
<b>A</b>	Calcium Chloride	<b>A</b>	Hydrogen Peroxide (90%)	<b>B</b>	Sodium Hydroxide
<b>A</b>	Calcium Hydroxide	<b>B</b>	Hydroquinone	<b>A</b>	Sodium Hypochlorite
<b>B</b>	Calcium Hypochlorite	<b>U</b>	Isophorone	<b>A</b>	Sodium Nitrate
<b>C</b>	Carbolic Acid	<b>A</b>	Isopropyl Alcohol	<b>C</b>	Stearic Acid
<b>U</b>	Carbon Bisulfide	<b>A</b>	Lead Acetate	<b>B</b>	Sulfur Dioxide
<b>B</b>	Carbon Tetrachloride	<b>B</b>	Linseed Oil	<b>A</b>	Sulfuric Acid (Dilute)
<b>U</b>	Cellosolve	<b>A</b>	Lubricating Oils (Petroleum)	<b>U</b>	Sulfuric Acid (Conc.)
<b>B</b>	Chloride (Dry)	<b>A</b>	Magnesium Sulfate	<b>B</b>	Sulfurous Acid
<b>C</b>	Chlorine (Wet)	<b>B</b>	Methyl Alcohol	<b>A</b>	Tannic Acid
<b>A</b>	Chloroacetic Acid	<b>U</b>	Methyl Bromide	<b>B</b>	Tetrachloroethylene
<b>U</b>	Chlorobenzene	<b>A</b>	Methyl Cellosolve	<b>U</b>	Tetrahydrofuran
<b>U</b>	Chloroform	<b>U</b>	Methyl Ethyl Ketone	<b>B</b>	Toluene
<b>U</b>	Chromic Acid	<b>U</b>	Methyl Isobutyl Ketone	<b>U</b>	Trichloroacetic Acid
<b>A</b>	Cobalt Chloride			<b>A</b>	Water
<b>A</b>	Copper Chloride				
<b>A</b>	Copper Sulfate				
<b>B</b>	Cottonseed Oil				
<b>B</b>	Cyclohexane				

**A** = Little or No Effect **B** = Minor to Moderate Effect **C** = Moderate to Severe Effect **U** = Not Recommended

\* See page 6 - Safe-T-Edge Strips Technical Data

### Applications

- Area Guarding
- Machine Guarding
- Perimeter Guarding

### Features

- Non-skid surface available in black ribbed top or yellow diamond top
- Resistant to common oils and chemicals
- No joining strips required
- 4 pole quick disconnect
- Electrical requirements: 24 volt, 1/2 amp AC or DC
- Flame and water resistant
- Hermetically sealed
- Sensitive edges
- No silicone

### Warranty

Jokab Safety will replace, within 1 year of shipment date, any Safe-T-Step mat that has been subject to normal use and is found to have defective materials or workmanship, as determined solely by our authorized factory representative. Replacements will be shipped to customer freight collect. This warranty is void where evidence of misuse or abuse is present.

### Approvals



**Manufacturer**..... JOKAB SAFETY

**Ordering Data/Article Numbers**..... see page 10:4

**Outer Material**..... PVC

**Assembled Mat Thickness**..... 5/8"

**Color**..... black

**Lead Wire**..... 10 m, 4 pin yellow micro DC disconnect

**Minimum Sensitivity**..... 66 lbs. (30 kg) per 3-1/8" (80 mm)  
(*diameter per EN1760*)

**Cycle Test**..... 1 million *plus*

**Maximum Width**..... 36" and 48" standard  
(*up to 56" optional*)

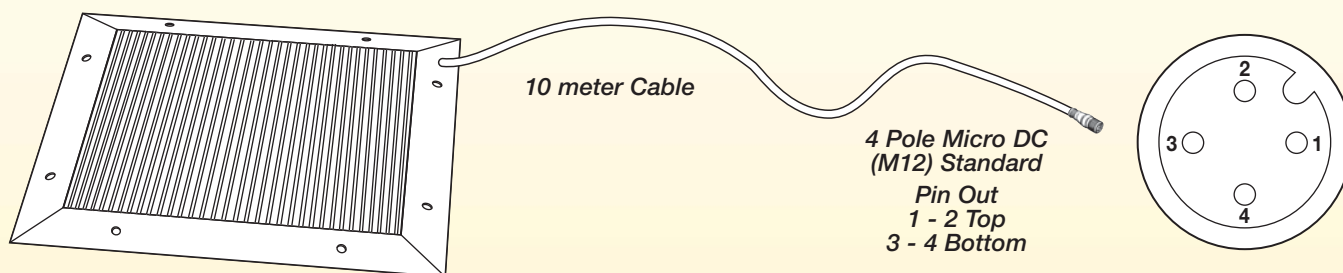
**Temperature Range**

Per EN1760..... -5°C to +40°C

Actual..... -29°C to +71°C

**Fire Resistance** ..... self-extinguishing  
**Weathering** ..... meets or exceeds minimum requirements per IEC 68-2-3, IEC 68-2-14  
**Cracking** ..... none @ 1/4" mandrel at -40°F  
**Hardness** ..... 93 +/- 5 ASTM-D-2240

## Safe-T-Step Connecting Cable



The diagram illustrates the Tina 4A Connection Block system architecture. On the left, four **Safety Mats with Quick-Disconnects (Q-D)** are shown, each connected to a **Tina 6A (Adapter)**. These adapters are then connected to the **Tina 4A (Connection Block)**, which is labeled as the **Field**. The Tina 4A block features a **LED Indication and Diagnostics** for each mat. It is connected to the **Vital 1 (Controller) Panel** via **4 Wires** and **4 Info** lines. The Vital 1 panel includes terminals for **Power**, **Outputs**, and **Status**.



## Component List - Safe-T-Step

Designation	Article Number	Description
JSNA-B-24x24	50-009-00	24" x 24" Safety Mat with 10m 4 wire and 4 pole connector installed.
JSNA-B-24x36	50-009-01	24" x 36" Safety Mat with 10m 4 wire and 4 pole connector installed.
JSNA-B-24x48	50-009-02	24" x 48" Safety Mat with 10m 4 wire and 4 pole connector installed.
JSNA-B-24x72	50-009-03	24" x 72" Safety Mat with 10m 4 wire and 4 pole connector installed.
JSNA-B-30x36	50-009-04	30" x 36" Safety Mat with 10m 4 wire and 4 pole connector installed.
JSNA-B-30x48	50-009-05	30" x 48" Safety Mat with 10m 4 wire and 4 pole connector installed.
JSNA-B-30x72	50-009-06	30" x 72" Safety Mat with 10m 4 wire and 4 pole connector installed.
JSNA-B-36x48	50-009-08	36" x 48" Safety Mat with 10m 4 wire and 4 pole connector installed.
JSNA-B-36x72	50-009-09	36" x 72" Safety Mat with 10m 4 wire and 4 pole connector installed.
JSNA-B-48x48	50-009-10	48" x 48" Safety Mat with 10m 4 wire and 4 pole connector installed.
JSNA-B-48x72	50-009-11	48" x 72" Safety Mat with 10m 4 wire and 4 pole connector installed.
JSNA-T-24x24	50-009-12	Optional Trim Kit for 24" x 24" Safety Mat
JSNA-T-24x36	50-009-13	Optional Trim Kit for 24" x 36" Safety Mat
JSNA-T-24x48	50-009-14	Optional Trim Kit for 24" x 48" Safety Mat
JSNA-T-24x72	50-009-15	Optional Trim Kit for 24" x 72" Safety Mat
JSNA-T-30x36	50-009-16	Optional Trim Kit for 30" x 36" Safety Mat
JSNA-T-30x48	50-009-17	Optional Trim Kit for 30" x 48" Safety Mat
JSNA-T-30x72	50-809-40	Optional Trim Kit for 30" x 72" Safety Mat
JSNA-T-36x48	50-009-20	Optional Trim Kit for 36" x 48" Safety Mat
JSNA-T-36x72	50-009-21	Optional Trim Kit for 36" x 72" Safety Mat
JSNA-T-48x48	50-009-22	Optional Trim Kit for 48" x 48" Safety Mat
JSNA-T-48x72	50-009-23	Optional Trim Kit for 48" x 72" Safety Mat

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# Safe-T-Edge Strips and Bumpers Electrically Activated Sensing Edges

Jokab Safety is dedicated to providing products that help reduce the risk of injuries to personnel and damage to equipment. We will continue this effort by offering our customers reliable, technologically advanced sensing products.

Our electronically activated Safe-T-Edge strips and bumpers will provide added protection to all of your door and gate applications. Our variety of styles allow for easy installation on nearly any motor-driven door or gate system.

Jokab Safety Safe-T-Edge strips and bumpers are designed to attach to the leading edge of motor driven doors and gates. Our strips and bumpers offer the most reliable reversing feature in the industry. The quality construction contains two completely flexible, conductive Alumaglas® contact elements separated by perforated foam. When touch-activated, the soft foam cushion inside compresses causing the internal contacts to meet and immediately send an electrical signal to stop or reverse the motor.

As an added feature, the Jokab Safety Safe-T-Edge strips provide a secure, weather-tight seal that conforms to the floor surface. The inner foam provides more insulation than typical hollow rubber loop seals. In many applications, installation is as easy as sliding out the existing seal, sliding in our strip and wiring to the motor.

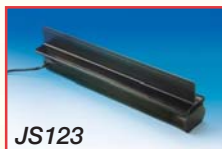
## Entrapment Protection

Our Safe-T-Edge electronically activated sensing strips provide entrapment protection for potentially dangerous motor-driven doors and gates by the most reliable, fast-acting signal available. We supply a variety of sensing strips that comply with ANSI/UL325 standards for entrapment protection when used on doors and gates. To comply with NEC NFPA codes, we use UL listed cords. All sensing strips are hermetically sealed at our factory by trained professionals and operate on 24 volts AC/DC. Sensing strips are activated by 5 psi (nominal) pressure along the entire span of the door opening.

Our sensing strips are manufactured with only the highest quality materials and components to assure durability. Outer covers are resistant to UV light degradation, bacteria, mildew and will not deteriorate under severe weather conditions. The flexible Alumaglas® contact elements and pure virgin foam assures contact separation even after major impacts. There is an inner vapor barrier to keep moisture and condensation away from internal contact elements. The Safe-T-Edge electrically activated sensing strips and bumpers offer a 4-wire conductor NC electrical configuration so that a loss of continuity in the circuit will cause a closing door to open and prevent an open door from closing. Safety professionals recommend the self-monitoring, 4-conductor configuration for optimum safety.



JS110



JS123



JSGR20



JS120



JSG020



JSGS20



JSNABUMPER

## Applications

- Overhead Doors
- Folding Doors
- Sliding Doors
- Elevator Doors
- Hangar Doors
- Barrier Arm Gates
- Sliding Gates
- Swinging Gates
- Vertical Lift Gates

## Features

- Weather-tight seal
- Touch-activated
- Quality construction
- Reliable reversing action
- Flexible contact elements
- Optional mounting channels available separately (see page 10-8)

**\*See  
Chemical  
Resistance  
Chart on  
Page 10-2**

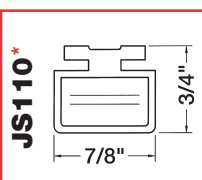
## Warranty

Jokab Safety will replace, within one year of shipment date, any Safe-T-Edge strip or bumper that has been subject to normal use and is found to have defective materials or workmanship, as determined solely by our authorized factory representative. This warranty is void where evidence of misuse or abuse is present. Jokab Safety manufactures product to meet stringent specifications and cannot assume responsibility for those consequences arising from improper installation or misuse. Installation instructions and testing procedures provided by Jokab Safety must be followed for proper operation and maintenance.

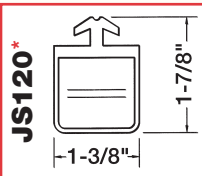
## Approvals

**UL 325 Recognized\***

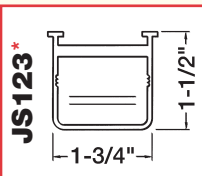
## Safe-T-Edge Strips Technical Data



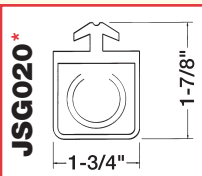
**Uses**..... gates, grills, counter shutters  
**Color**.....black  
**Configuration**.....4 conductor  
**Wire Outlet**.....end, left or right  
**Options**.....flush mount or clip-on mounting channel



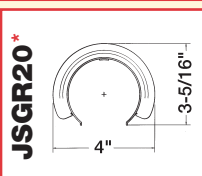
**Uses**..... gates, grills, commercial doors  
**Color**..... black, white or caution yellow  
**Configuration**.....4 conductor  
**Wire Outlet**.....end, left or right  
**Options**.....flush mount aluminum or PVC mounting channel



**Uses**..... gates, grills, commercial doors  
**Color**..... black or caution yellow  
**Configuration**.....4 conductor  
**Wire Outlet**.....end, left or right  
**Options**.....flush mount aluminum or PVC mounting channel

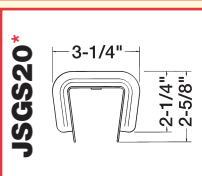


**Uses**..... gates, grills, commercial doors  
**Color**.....black, white or caution yellow  
**Configuration**..... 4 conductor  
**Wire Outlet**.....end, left or right  
**Options**.....flush mount aluminum or PVC mounting channel



**Uses**..... gates, commercial doors  
**Color**.....black, white or caution yellow  
**Configuration**.....4 conductor  
**Wire Outlet**.....end, left or right

3-sided activation



**Uses**..... gates, commercial doors  
**Color**.....black, white or caution yellow  
**Configuration**.....4 conductor  
**Wire Outlet**.....end, left or right

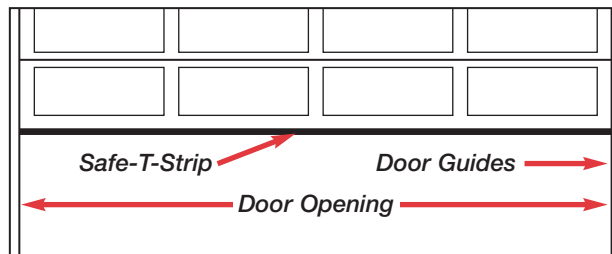
3-sided activation

DOORS	JS110	JS120	JS123	JSG020	JSGR20	JSGS20
OVERHEAD Rolling		X	X			
Grills	X	X	X			
Shutters	X					
Sectional	X					
REVOLVING			X			
FOLDING/SLIDING		X				
ELEVATOR	X		X			
GATES	JS110	JS120	JS123	JSG020	JSGR20	JSGS20
Barrier Arms	X		X	X		
Cantilever	X		X	X		
Pivot		X	X	X	X	X
Sliding		X	X	X	X	X
Swinging				X	X	X
Vertical Lift		X	X	X		

Note: Length is determined by your specific requirements.  
 For Ordering Data see page 10:7.

## How to Measure a Door Opening to Properly Order a Safe-T-Edge

- Step 1** Determine the type of door you are installing.  
 Example: rolling steel, sectional, etc.
- Step 2** Measure the door opening as shown in the diagram below.
- Step 3** Contact our sales office to place your order.  
 Please supply the dimensions of the door opening to our representative.



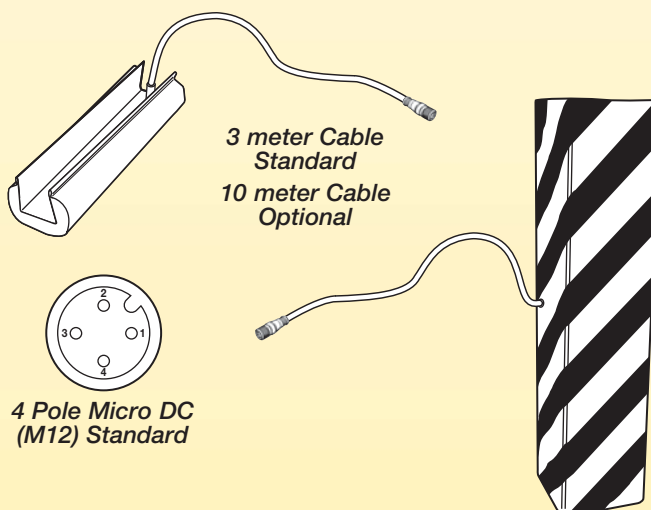
## Safe-T-Edge Bumpers Technical Data



**Uses**..... hangar doors, freezer doors  
**Color**..... black, grey, yellow or white  
**Configuration**.....4 conductor  
**Wire Outlet**..... end, left, right or top  
**Options**.....black/yellow striped cover

Note: Dimensions are determined by your specific requirements.  
 For Ordering Data see page 10:7.

## Safe-T-Edge Connecting Cable



## Safe-T-Edge Ordering Data

### Safe-T-Edge Strips

To create a complete Safe-T-Edge Strip Part Number, simply fill in the fields below.

JS      - 4      -      -      M  
A B C D E

**A** This letter represents the style of the Safe-T-Edge Strip.

110	0.875"w x 0.750"h	G020	1.75"w x 1.8750"h
120	1.375"w x 1.875"h	GR20	4.00"w x 3.3125"h
123	1.750"w x 1.875"h	GS20	3.25"w x 2.6250"h

**B** This letter represents the color of the Safe-T-Edge Strip.

Y yellow    W white         (Leave blank for black)

**C** This letter represents the location of the wire outlet on the Safe-T-Edge Strip.

E end    L left    R right

**D** This letter represents the length of the Safe-T-Edge Strip in inches.

**E** This letter represents the length of cable for the Safe-T-Edge Strip in meters.

(Leave blank if ordering standard 3m length.)

### Example

JS 110Y - 4 L - 48 - 6 M  
A B C D E

110 style yellow Safe-T-Edge Strip with wire outlet located on the left, 48" in length, with a 6m cable.

### Safe-T-Edge Bumpers

To create a complete Safe-T-Edge Bumper Part Number, simply fill in the fields below.

JSMU      - 4      -      -      -      M  
A B C D E

**A** This letter represents the width and height of the Safe-T-Edge Bumper.

42	4"w x 2"h	44	4"w x 4"h
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**B** This letter represents the location of the wire outlet on the Safe-T-Edge Bumper.

E end    L left    R right    U universal

**C** This letter represents the color of the Safe-T-Edge Bumper.

Y yellow    W white    B black  
YB yellow/black striped

**D** This letter represents the length of the Safe-T-Edge Bumper in inches.

**E** This letter represents the length of cable for the Safe-T-Edge Bumper in meters.

(Leave blank if ordering standard 3m length.)

### Example

JSMU 42 - 4 R - YB - 36 - 2 M  
A B C D E

4"w x 2"h Safe-T-Edge Bumper with wire outlet located on the right, yellow/black striped, 36" in length, with a 2m cable.

## Safe-T-Edge Ordering Data

### Safe-T-Edge Channel

To create a complete Safe-T-Edge Channel Part Number, simply fill in the fields below.

JS      -      -     

**A**

**B**

**C**

**A** This letter represents the style of Safe-T-Edge Strip you are ordering Safe-T-Edge Channel for.

110*	(0.875"w x 0.750"h)	
120*	(1.375"w x 1.875"h)	
123**	(1.750"w x 1.875"h)	
G020*	(1.750"w x 1.8750"h)	

*Channel Profiles*

**B** This letter represents the material used and the style of the Safe-T-Edge Channel required.

<b>C</b>	<u>aluminum</u>	<b>PC</b>	<b>PVC</b>
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**C** This letter represents the length of the Safe-T-Edge Channel in inches.

### Example

**JS110 - PC - 48**

**A**

**B**

**C**

PVC Safe-T-Edge Channel for 110 style Safe-T-Edge Strip, 48" in length.

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