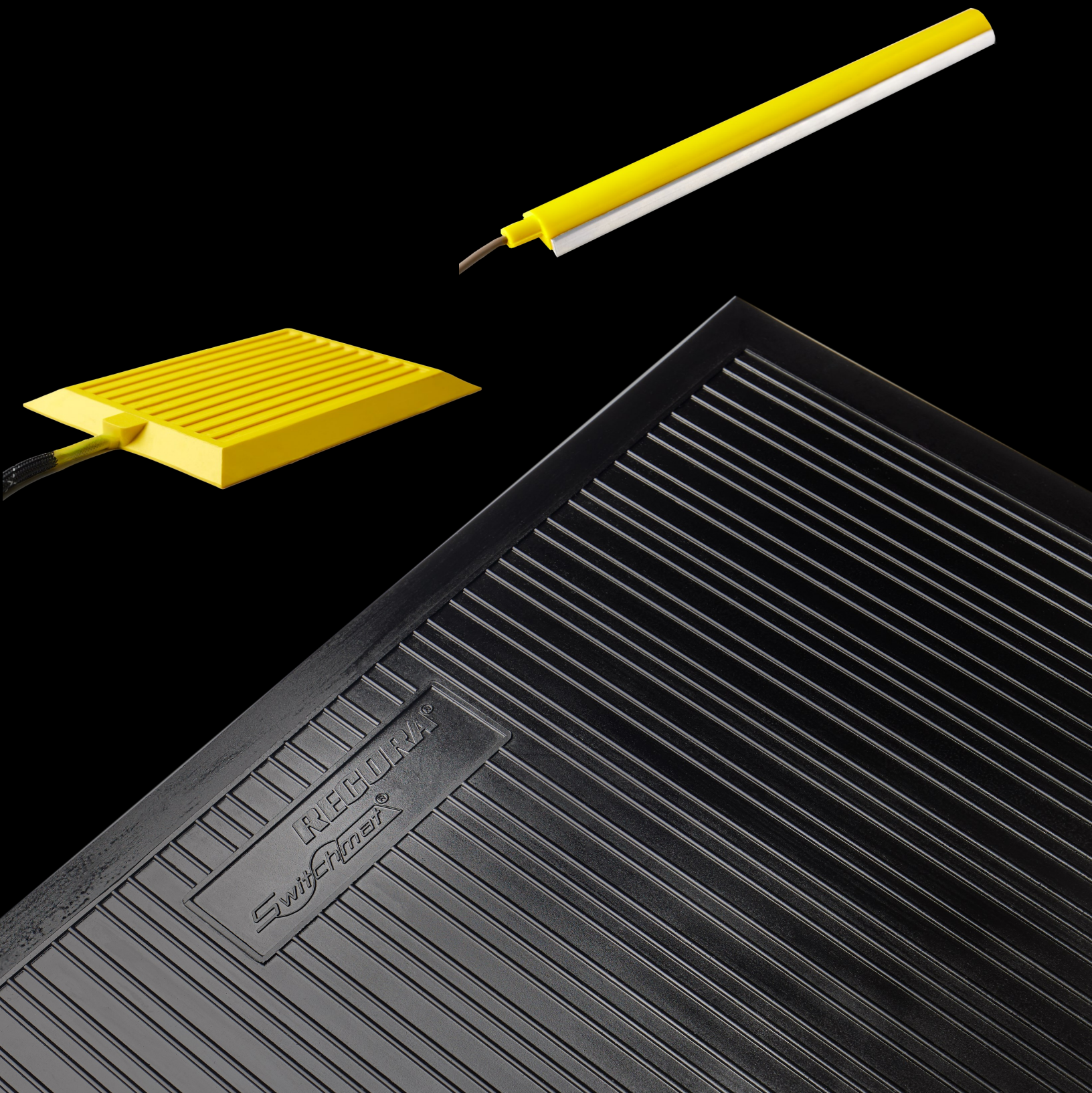


RECORA

Presence Detection & Safety products



SWITCHMATS BUILT TOUGH & DEPENDABLE:

The workplace today is driven by regulations. ANSI writes the rules, OSHA enforces them, and companies conform.

Recora has developed Switchmat and presence detection solutions so companies can protect their workers and conform to safety requirements.

Recora has been manufacturing Switchmats for over 75 years. Built tough & dependable, the proven Recora switchmat technology has performed in hot, cold, wet, dry, dusty, and clean environments with reliability you can count on.

RUGGED DESIGN:



Industrial strength to last years. 3/8" or 1/2" thick, completely molded in solid vinyl surrounding twin steel plates, Recora Switchmats are designed and constructed to resist oil, dirt, weld splatter, chemicals, and severe temperatures.

While built to demanding industrial specifications, Recora Switchmats are sensitive to light foot touch and will actuate on demand.

INVENTIVE AND CUSTOMIZABLE:

Available in a variety of configurations and adaptable to all environments, Recora has developed a wide variety of pressure-sensitive systems to make the workplace a safer environment. From standard presence detection to intrinsically safe solutions, conforming to your needs is the number one reason why Recora has grown to be one of the leaders in the industry.



SWITCHMATS

SERIES 12, 15 & 30 Switchmats have been designed for presence sensing applications for stand alone operator detection in smaller areas. Depending on how these Switchmats are combined with the machine control wiring, these models can require the operator to step on the Switchmat, or off the Switchmat before the machine will cycle or operate. Series 12, 15 & 30 are thin (3/8") versatile Switchmats; perfect coverage when actuating bells, alarms, door signals or safety cut-outs.

SERIES 12 & 30 have a corrugated surface with a molded ramp edging. Series 15 has a smooth surface with molded blunt edge. When HD (dual leads) Series Switchmats are being used for machine protection, the Recora Fail-Safe Controller (FSC-6) provides fail-safe operation against severed leads, transformer failure or power outage. (See Fail-Safe Control information on literature sheet.)

CONSTRUCTION - Recora Switchmats are completely molded. The molded mats resist dirt, oil, weld splatter and most harsh industrial liquids. As with all Recora Switchmats, Series 12, 15 & 30 are active over 95% of their surface areas. Mats are designed for low voltage operation, Class II N.E.C. circuit operation, 12 watts at 24 volts AC or DC. Switch is single pole, single throw, normally open, momentary contact type.

SENSITIVITY - Standard sensitivity is 10-15 lbs. (Custom Sensitivity available).

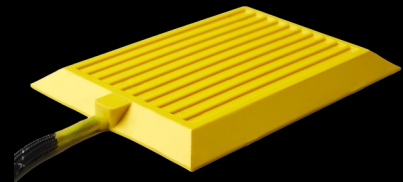
LEAD WIRES -Series 12H, 15H & 30H leads are single 10' 18 AWG 2-conductor wire, 300 volt, 7 amp capacity. Series 12HD, 15HD & 30HD have dual leads for connecting to a Fail-Safe Control Unit. Single 4-conductor lead wires are optional.

COLOR- Standard color for Series 15 & 30 is black. Brown is standard for Series 12. Other colors are available for Series 12, 15 & 30 Switchmats. All series are available in safety yellow.

SIZES -See Pages 7-9 for further description, part numbers, and custom configurations.

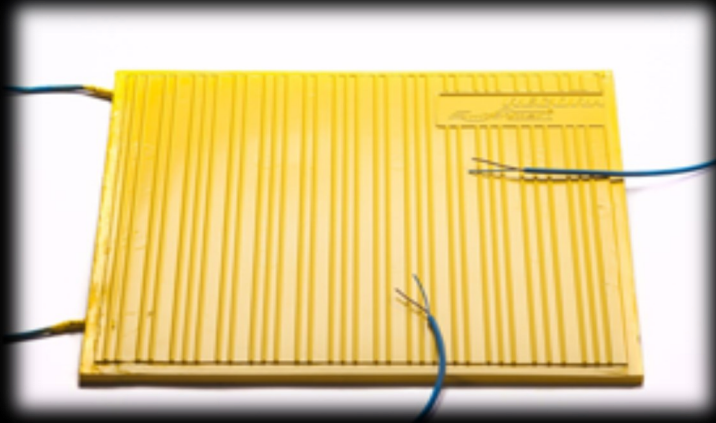


SERIES 12, 15, & 30 Switchmat



NF-2 Neptune Footswitch

Recora Heavy Duty (HD) & Extra Heavy Duty (EHD) Safety Mats



4 wire lead (HD)

Blunt Edge (EHD)

Available: Molded Ramp Edge,
Aluminum Edge (14HD & EHD)

Corrugated Surface

Available: Smooth Surface (EHD)

Recora Standard Dual Lead Safety Mats

When HD (dual leads) Series Switchmats are being used for employee protection, the Recora Fail-Safe control (FSC-6) provides fail-safe operation against severed leads, transformer failure or power outage.

Construction – Switchmats are 3/8" thick, completely molded in solid vinyl, not laminated, with corrugated surfaces. Conforming to IP67 standards, Recora Mats resist dirt, oil, weld splatter and most harsh industrial liquids. Series 14H are active over 95% of their surface area. Switchmats are designed for low voltage operation, 12 watts at 24 volts AC or DC. All Recora Switchmats comply with ANSI/RIA standards for robot and machine guarding.

Sensitivity – Standard sensitivity is 10-15 lbs. Activation pressure can be manufactured to almost any sensitivity requirement.

Lead Wires – One (1) 10' 18 AWG type SPT 2-conductor lead, 300 volt, 7 amp capacity, is standard for the Series 14H Switchmat. Series 14HD has two (2) 10' leads, the same type as 14H Series. Additional lead lengths are available. The 18 AWG 2-conductor wire and our 4-conductor lead wire are other options.

Color – Standard colors are black, brown, and yellow.

Sizes – Standard Sizes listed below. Custom Sizes Available.

Applications - Robot Welding / Automated Material Handling / Pick & Place Robots / Assembly Machines / Laser Welding / And Other Hazardous Areas / CNC Punches & Tube Benders, Packaging Machinery.

Aluminum Trim – Available styles are Active Ramp Edging (MSE), Blunt Edging (REM), and Active Mat Connector (NE). Conduit connector (p/n 1585).

See Pages 10-12 for further description, standard part numbers, and custom configurations.

Recora Sensi-Switch

When flexible, reliable sensing in a harsh, hazardous work environment is the application, Sensi-Switch is the solution.

Sensi-Switch is a safety switch for conveyors, machinery, lift tables, assembly lines - any place you want an emergency shut-off device for safety. Molded into a tough urethane strip, it can span the entire length of a conveyor to put automatic safety or operation control at each employee's fingertips. Just a simple touch (3 to 5 lbs.) can activate an alarm or shutdown a system.

Temperature and weather-resistant, Sensi-Switch can be used indoors or out, and under just about any type of industrial application. And because it's molded, contaminants can't get inside the Recora Sensi-Switch. Sensi-Switch contacts are specially tempered stainless steel and will not rust or corrode. Intrinsically safe options are available. Sensi-Switch is long on protection and extremely economical. Lead exits can be designed to your specific requirements.

Construction – Sensi-Switch is a 1/2" thick, 1" wide molded urethane half circle configuration with a 1/2" radius. Standard leads are 2' in length for ease of installation. Custom lead lengths are available.

Sensitivity – Standard sensitivity is 3 to 5 lbs. Custom sensitivity is available.

Lead Wires – Standard lead length is 2' 18 AWG SVT 2-conductor wire. Optional leads can be up to 100', 4-conductor wire is also an option. Custom lead wire design available.

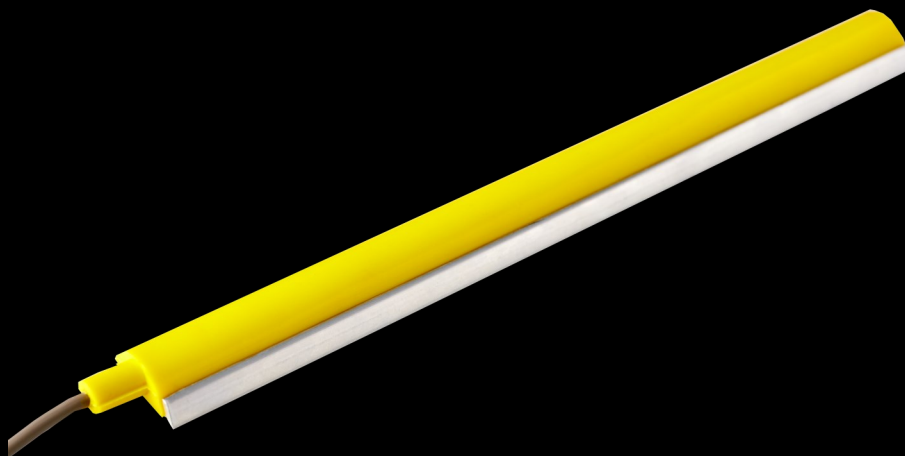
Colors – Black, yellow, red. Custom colors available with minimum order quantities.

Features:

- Positive protection for hazardous locations.
- Weather resistant solutions available for outdoor applications.
- Embedded electrical switch provides positive safety control.
- Molded urethane strip stands up to industrial conditions.
- Aluminum Sensi-Track® available for mounting of Sensi-Switch.
- A light touch activates switch. The entire strip is active - No Dead Spots.
- Intrinsically safe options are available.

Sensi-Track aluminum mounting bracket is sold separately & available in standard and custom lengths.

Please see Page 14 for available models, part numbers, & custom options.



Recora Car Wash Treadles & Sensors

N-Series Recora Auto Alert

An automatic vehicle detector for commercial and industrial use. Rugged, weather-resistant detector with Auto Alert Ramp is built to last. Saves on costly maintenance.

Includes a simple electrical switch embedded in the trip device.

Ideal for car washes and industrial traffic control.

Cleats grip the tire and minimize slippage while improving traction (N-Series with Traction control).

Auto Alert provides automatic vehicle detection without frequent maintenance worries. Auto Alert is an extremely effective, yet uncomplicated, economical vehicle detection device, perfect for any drive through oriented business, parking system or as an industrial door control. The vehicle simply passes over the molded weather-resistant vinyl detector and the system is activated. Auto Alert is easily wired to lights, horn, bells, or any signaling device.

For industrial use, the Auto Alert can provide an efficient method of traffic management. Located strategically around the plant, the detectors can be wired to open and close doors, activate warning signals, or actuate machinery.

The car wash industry finds the Auto Alert ideal for turning equipment on and off without touching cars. The Recora Auto Alert is rugged enough to work under multi-ton trucks, yet sensitive enough to react to the smallest, lightest cars. The Auto Alert is safer, faster and easier to move to any spot in the wash tunnel or on the apron for exact timing control. The Auto Alert has hundreds of uses.

Construction – Auto Alert is molded (not laminated) to 3/16" steel base plate, 7/8" thick, mounting holes in corners. Conforms to IP67 standards.

Sensitivity – Standard sensitivity is 10-15 lbs. Custom sensitivity available to fit your applications.

Lead Wires – Standard lead wires are 10' 18 AWG 2-conductor cable, 300 volt, 7 amp. Lead lengths can be made up to 150'.

Color – Black is standard color. Also available in safety yellow.

See Page 14 for available models / part numbers.

*N-Series with
traction control*



N-Series



Recora Presence Detection Mats / Switchmats®- Molded Edge

Series 12H, 14H, 15H & 30H Switchmats



Molded Ramp Edge (12H, 30H, 30HD)

Available: Blunt Edge (15H, 15EHD)
& Aluminum Edge (14H)

Corrugated Surface (12H, 14H, 30H)

Smooth Surface (15H, 15EHD)

2 wire lead

Available: Safety / 4 wire lead (HD)

Series 12H, 14H, 15H & 30H Switchmats have been designed for presence sensing applications for stand alone operator detection in smaller areas. Depending on how these Switchmats are combined with the machine control wiring, these models can require the operator to step on the Switchmat, or off the Switchmat before the machine will cycle or operate.

Series 12H, 15H & 30H are thin (3/8") and versatile; perfect coverage when actuating bells, alarms, door signals or safety cut-outs.

Series 12H & 30H have a corrugated surface with a molded ramp edging. Series 15H has a smooth surface with molded blunt edge.

When **HD** (dual leads) Series Switchmats are being used for machine protection, the Recora Fail-Safe control (FSC-6) provides fail-safe operation against severed leads, transformer failure or power outage.

Construction – Switchmats are completely molded, not laminated. Conforming to IP67 standards, the mats resist dirt, oil, weld splatter and most harsh industrial liquids. As with all Recora Switchmats, Series 12, 15 & 30 are active over 95% of their surface areas. Mats are designed for low voltage operation, 12 watts at 24 volts AC or DC. Switch is single pole, single throw, normally open, momentary contact type.

Sensitivity – Standard sensitivity is 10-15 lbs. Sensitivity can be custom calibrated to your requirements.

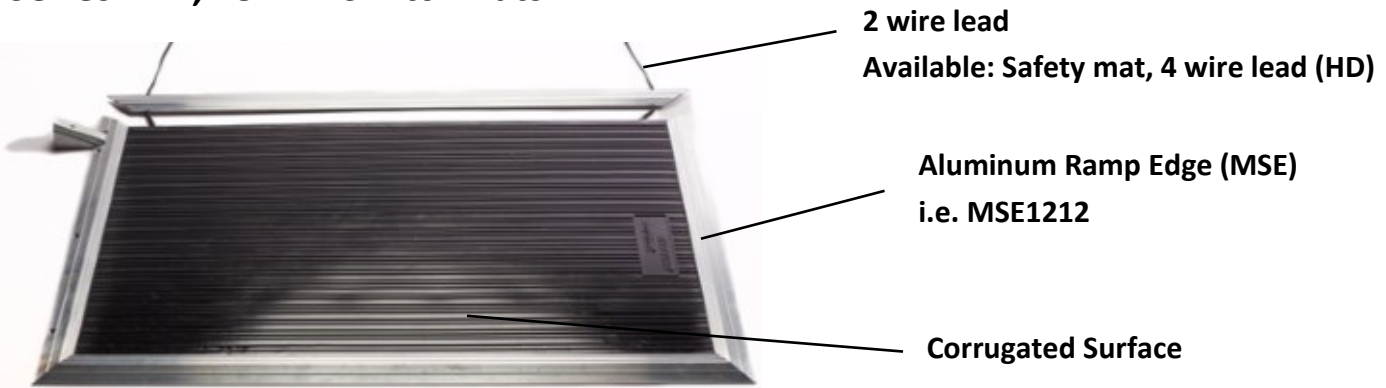
Lead Wires – Series 12H, 15H & 30H leads are single 10', 18 AWG 2-conductor wire, 300 volt, 7 amp capacity. Series 12HD, 15HD & 30HD have dual leads for connecting to a Fail-Safe Control Unit. Single 4-conductor lead wires are optional.

Color – Standard color for series 15H & 30H is black. Safety yellow also available. Brown is the standard color for series 12H.

Sizes – See Pages 9 for standard part numbers and custom configurations.

Recora Presence Detection Mats / Switchmats® - Aluminum Edge

Series 14H, 15EHD Switchmats



Series 14H, 14HD & 14EHD Switchmats have been designed for presence sensing applications for stand alone operator detection in smaller areas. Depending on how these Switchmats are combined with the machine control wiring, these models can require the operator to step on the Switchmat, or off the Switchmat before the machine will cycle or operate. The extruded aluminum edge provides flexibility of size and shape of the mat, heavy duty edging, and a strong anchor point for the mats.

Series 14H, 14HD & 14EHD have a corrugated surface, are thin (1/2") and versatile; perfect coverage when actuating bells, alarms, door signals or safety cut-outs.

Series 15H has a smooth surface with molded blunt edge.

When **HD** (dual leads) Series Switchmats are being used for machine protection, the Recora Fail-Safe controller (FSC-6) provides fail-safe operation against severed leads, transformer failure or power outage.

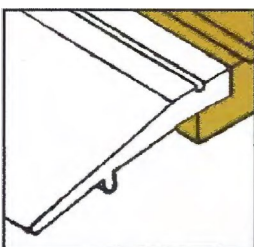
Construction – Switchmats are completely molded. Conforming to IP67 standards, Recora mats resist dirt, oil, weld splatter and most harsh industrial liquids. As with all Recora Switchmats, Series 12, 15 & 30 are active over 95% of their surface areas. Mats are designed for low voltage operation, 12 watts at 24 volts AC or DC. Switch is single pole, single throw, normally open, momentary contact type.

Sensitivity – Standard sensitivity is 10-15 lbs. Custom sensitivity is available.

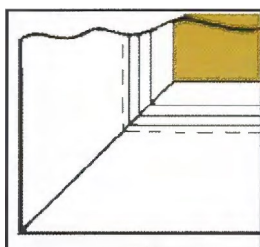
Lead Wires – Series 12H, 15H & 30H leads are single 10', 18 AWG 2-conductor wire, 300 volt, 7 amp capacity. Series 12HD, 15HD & 30HD have dual leads for connecting to a Fail-Safe Control Unit. Single 4-conductor lead wires are optional. Extra Heavy Duty mats (EHD) have 20' lead wires.

Color – Brown is standard for series 12; Standard color for series 12, 15 & 30 is black. Other colors are available for series 12, 15 & 30 Switchmats.

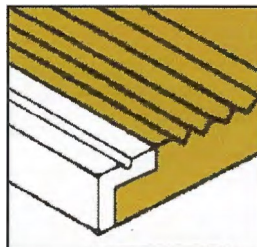
Aluminum Trim – Active Ramp Edging (MSE), Blunt Edging (REM), and Active Connector (NE). Conduit connector (p/n 1585).



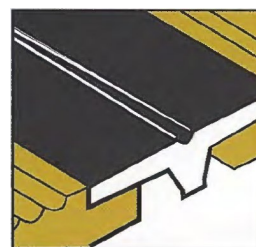
Active Ramp Edging



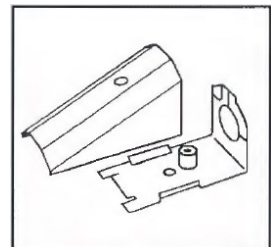
Active Ramp–
Mitered Corner



Blunt edge



Active Mat connector



Conduit connector

9

HD & EHD (Extra Heavy Duty) 4 Wire Presence Detection Safety Mats



The standard in the safety mat industry Recora Series **14HD** Industrial Safety Mats provide effective safety barriers to both workers and vehicles entering hazardous or restricted machine and production areas. They can be wired to stop robots, machinery, doors, alarms... most any type of mechanical or moving equipment imaginable. Recora Safety Mats are used in almost any environment, wherever safety and security are paramount. The **Extra Heavy Duty (EHD)** series is used in applications that require the mats to withstand heavier equipment used in everyday operations such as forklifts.

When safety and security areas don't conform to standard Safety Mats sizes, Series 14HD Safety Mats are ideal for customizing. By adding Recora's Snap-On Aluminum Connectors and Edging, Series 14HD can be configured to fit any size area needed.

These Safety Mat Systems can be customized for sensitivity, activation, layout design and sized to cover any area to help provide worker protection from restricted or hazardous machine areas...even around cutouts for machine legs, posts, walls, etc. Recora's FSC-6R Relay added to Series 14HD Safety Mat Systems will provide level 3 protection.

Recora Industrial Safety Mats are available in either a single or dual lead configuration, designated as HD for dual lead. The type of series used should only be determined after a risk assessment is performed. The level of safety protection required for a given application is based on the risk associated with that application. The risk associated with an operation is based on a number of factors that must be taken together and evaluated in total to establish the risk level for any equipment or operation. It is important to note that using a Safety Mat alone will not make the installation a safety system. A Safety Mat monitoring controller must be used to complete the safety system. When a 14HD and 14EHD (4-wire) series Safety Mat are used together with the FSC-6R Relay, the safety system reaches a safety category 3 level. Safety controls must have positive operation indicators; force guided relays, redundant critical control components in order to meet the ANSI B11.19 guidelines.

Construction – Recora Industrial Safety Mat is manufactured using a proven plate contact technology. The twin steel plates form an electrode inside the mat. The plates are held apart by strategically place silicone spacers that are important to the sensitivity of the mat. When the mat is activated, the top and bottom plate come in contact closing, sending a signal to the monitoring device. The outer skin of the mat is a totally molded plastisol (vinyl) material. 20' leads included with all Extra Heavy Duty (EHD) mats.

Recora will manufacture Switchmat units in almost any size or shape to meet your special requirements. Send size and control specifications.

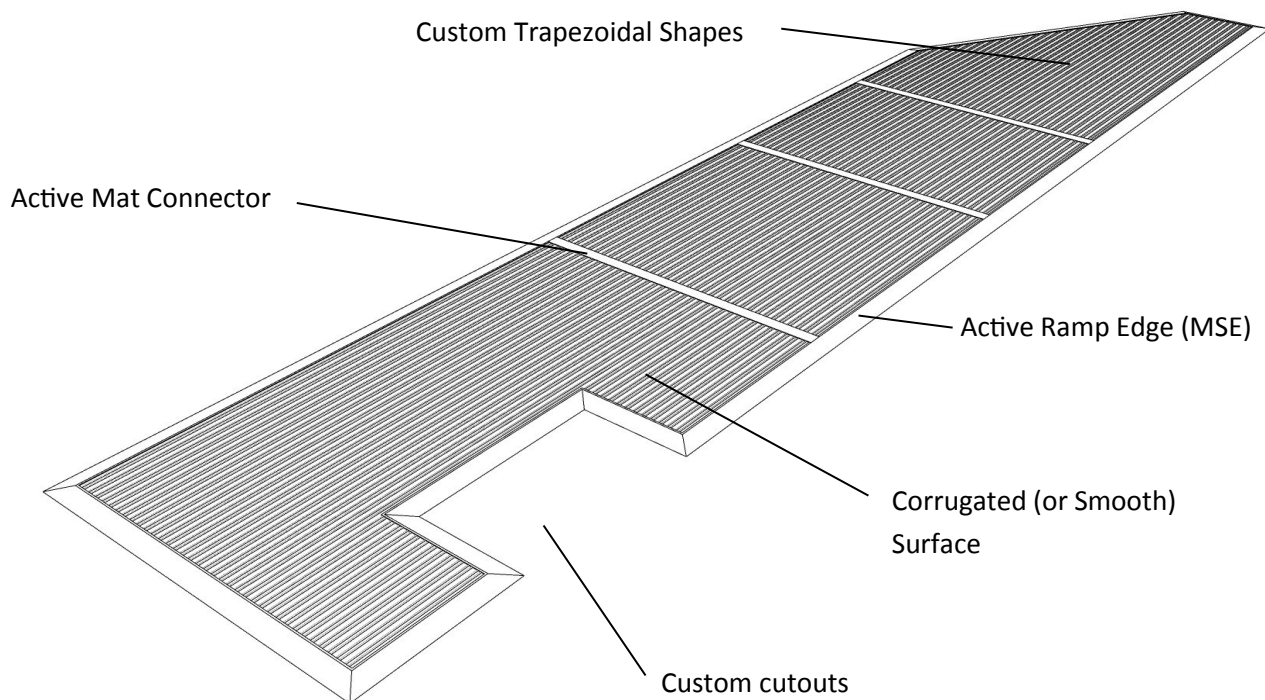
All Safety Mats and systems comply with ANSI/RIA standards for Robot Guarding.

- High impact resistance
- Safety Mats are totally molded, not laminated, to help prevent fluid entry
- Extruded aluminum 2.000" ramp or 0.750" blunt edging and conduit connector included for securing the larger 14HD and – EHD series Safety Mats.

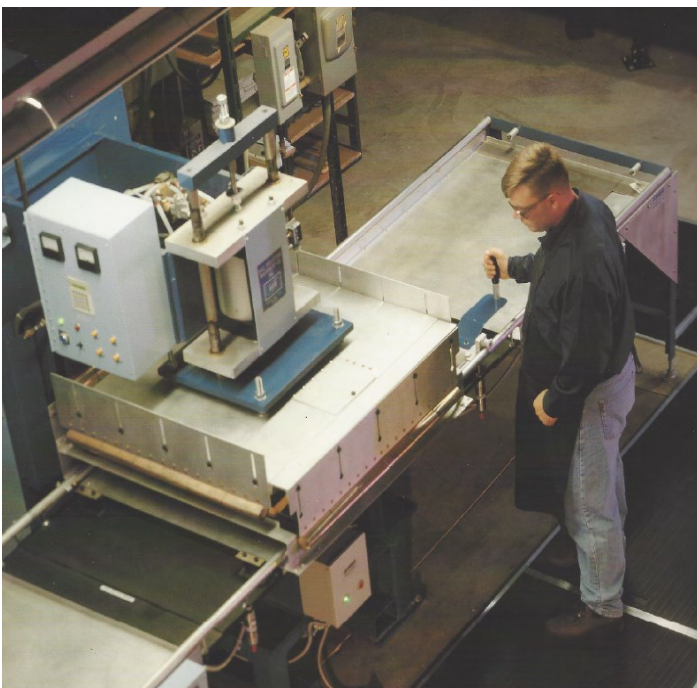
Sizes – See Page 12 for standard part numbers and custom configurations.

Recora Perimeter Presence Detection & Safety System Design

Designed and built to fit your specific application. Please contact us for details & assistance.



Recora pressure sensitive mats, ribbon switches, treadle pads, controllers, and custom switches have successfully served the market providing rugged reliability and outstanding quality. For a growing number of operations, electronic safety mats have become an adaptable solution for machine guarding. Assembly machines, robotic welding and continuous assembly production lines are just a few of the numerous applications for presence sensing matting. The Recora product line services the industrial, medical, car wash, and consumer markets.



RECORA will manufacture Switchmat units in almost any size or shape to meet your special requirements.

All Safety Mats and systems comply with ANSI/RIA standards for Robot Guarding.

- High impact resistance
- Safety Mats are totally molded to help prevent fluid entry.
- Extruded aluminum 2.000" ramp or 0.750" blunt edging and conduit connector included for securing the larger 14HD and EHD series Safety Mats.
- Custom sizes & cut-outs available.
- Safety application assistance.

4-Wire HD & EHD Safety Switchmats® - Part Number Configuration

Std. Part # configuration:

(10' lead included)

(20' lead included for EHD)

$\frac{a}{b} - \frac{c}{e}$
(for aluminum edge only)

Custom & Configured Sizes:

$\frac{27}{a} - \frac{60}{b} - \frac{14EHD}{c} - \frac{Y}{d} - \frac{REM}{e} - \frac{50'L}{\text{custom lead}}$

i.e. 2760-14EHD-Y-REM-50'L

4-Wire Safety Mat, 27" x 60", Extra Heavy Duty, (2) Single 2 wire cables (4-WIRE), Yellow, Blunt Edging, Custom 50' lead

a	b	c	d	e				
Length (Inch)	Width (inch)	Series	Standard Color	Custom Color	Standard Edge	Surface	Weight (lbs)	Dimensions
12HD: 4-wire, Corrugated top, molded ramp edge, Standard Brown color, Standard Sizes / Configuration:								
10	17	12HD	Brown	-BL or -Y	Molded Ramp	Corrugated	9	10" x 17"
14	23	12HD	Brown	-BL or -Y	Molded Ramp	Corrugated	11	14" x 23"
10	30	12HD	Brown	-BL or -Y	Molded Ramp	Corrugated	20	18" x 30"
30	30	12HD	Brown	-BL or -Y	Molded Ramp	Corrugated	35	30" x 30"
30HD: 4-wire, Corrugated top, molded ramp edge, Standard Black color, Standard Sizes / Configuration:								
10	17	30HD	Black	-BR or -Y	Molded Ramp	Corrugated	9	10" x 17"
14	23	30HD	Black	-BR or -Y	Molded Ramp	Corrugated	11	14" x 23"
18	30	30HD	Black	-BR or -Y	Molded Ramp	Corrugated	20	18" x 30"
30	30	30HD	Black	-BR or -Y	Molded Ramp	Corrugated	35	30" x 30"
14EHD: 4-Wire, Molded Ramp or Blunt edge, Corrugated or smooth top, Extra Heavy Duty, Std. Sizes / Configuration:								
10	17	14EHD	Black	-BR or -Y	Molded Ramp	Corrugated	12	10" x 17"
14	23	14EHD	Black	-BR or -Y	Molded Ramp	Corrugated	13	14" x 23"
18	30	14EHD	Black	-BR or -Y	Molded Ramp	Corrugated	24	18" x 30"
30	30	14EHD	Black	-BR or -Y	Molded Ramp	Corrugated	50	30" x 30"
8	24	14EHD	Black	-BR or -Y	Molded Blunt	Smooth	7	8" x 24"
8	27	14EHD	Black	-BR or -Y	Molded Blunt	Smooth	8	8" x 27"
12	12	14EHD	Black	-BR or -Y	Molded Blunt	Smooth	9	12" x 12"
12	36	14EHD	Black	-BR or -Y	Molded Blunt	Smooth	13	12" x 36"
16	16	14EHD	Black	-BR or -Y	Molded Blunt	Smooth	12	16" x 16"
18	36	14EHD	Black	-BR or -Y	Molded Blunt	Smooth	29	18" x 36"
14HD & 14EHD: 4-Wire, Snap in aluminum trim (MSE included), Heavy Duty 4 wire (14HD) or Extra Heavy Duty (14EHD), Standard & Configured Sizes:								
12	12	14HD or 14EHD	Black	-BR or -Y	-TK	Corrugated	11	10" x 17"
24	24	14HD or 14EHD	Black	-BR or -Y	-TK	Corrugated	28	10" x 17"
27	27	14HD or 14EHD	Black	-BR or -Y	-TK	Corrugated	37	27.5" x 27.5"
30	30	14HD or 14EHD	Black	-BR or -Y	-TK	Corrugated	43	30" x 30"
35	35	14HD or 14EHD	Black	-BR or -Y	-TK	Corrugated	60	35.5" x 35"
	43	14HD or 14EHD	Black	-BR or -Y	-TK	Corrugated	See chart below	(a) " x 43"
	48	14HD or 14EHD	Black	-BR or -Y	-TK	Corrugated	See chart below	(a) " x 48"
	57	14HD or 14EHD	Black	-BR or -Y	-TK	Corrugated	See chart below	(a) " x 57"
	60	14HD or 14EHD	Black	-BR or -Y	-TK	Corrugated	See chart below	(a) " x 60"
	72	14HD or 14EHD	Black	-BR or -Y	-TK	Corrugated	See chart below	(a) " x 72"

Custom sizes, shapes, & sensitivity to fit your application are available.

[e] Available Aluminum Trim:

TK - Trim kit. Std. Active Ramp Edging (Included)

MSE - Active Ramp Edging (Custom)

REM - Blunt Edging

NE - Active Mat connector

WO - No Aluminum edging

Replacement Trim kit (TK) available:

Part # Example: TK (a) (b) - (e)

TK2424-MSE

14HD Weight Estimation Chart	
Examples:	
(a) x (b) = Sq. Inches	Sq. In. x Av. = Est. lbs
24 x 30 = 720 Sq. In.	720 x 0.049 = 36
27.5 x 43 = 1182 Sq. In.	1182 x 0.049 = 57
30 x 48 = 1440 Sq. In.	1440 x 0.049 = 63
35 x 60 = 2100 Sq. In.	2100 x 0.049 = 102

14EHD Weight Estimation chart	
Examples:	
(a) x (b) = Sq. Inches	Sq. In. x Av. = Est. lbs
24 x 30 = 720 Sq. In.	720 x 0.056 = 42
27.5 x 43 = 1182 Sq. In.	1182 x 0.056 = 66
30 x 48 = 1440 Sq. In.	1440 x 0.056 = 80
35 x 60 = 2100 Sq. In.	2100 x 0.056 = 118

Recora Safety Controller - FSC Series



The **Recora FSC-6 Failsafe Safety Mat Controller** is designed as a complete, self-contained, mat controller suitable to use at all levels of risk mitigation requirements in industrial applications. The FSC-6 is available in various configurations to match the appropriate level of protection to the potential risk without sacrificing productivity. Special control configurations available.



Recora FSC-6 Relays integrate a number of sophisticated safety design concepts to ensure the highest degree of safe operation along with the best possible protection for equipment and personnel. FSC-6 Relays are available in two configurations to match the appropriate level of protection to the potential risk without sacrificing productivity. 115 VAC & 24 VDC. Manual reset option available.

Partial Listing of Applicable Safety Standards

ANSI B11.19-1990 Machine Tools – Safeguarding when referenced by other B11 machine tool safety standards – performance criteria for the design, construction, care, **and** operation.

ANSI/RIA R15.06-1992 – for Industrial Robots and Robot Systems – Safety Requirements.

ANSI Z244.1-1982 Personnel protection – Lockout/tagout of energy sources – Minimum safety requirements.

ANSI/ASME B15.1 – 1984 Safety standard for mechanical power transmission apparatus.

ANSI/NFPA 79-1991 Electrical standard for industrial machinery

Recora Hands Free Power Toggle switch



Recora CB1R Hands-Free Toggle Switch— To toggle power between sources

The **Recora CB1R Mini-Controller** is a convenient device for controlling one or more 120V electrical sources from a Recora Switchmat. The 4" x 5" x 3" box provides low voltage to the mat.

The **Recora CB1R toggle switch** contains a 24 VAC step-down transformer, a relay with a switching capacity of 15 amps, two AC outlets (one normally ON and one normally

OFF), and a socket and plug provided for connecting the 24 VAC to the Recora Switchmat or Sensi-Switch. Recora CB1R Mini-Controllers contain a 24 VAC step-down transformer, a relay with a switching capacity of 15 amps, two AC outlets (one normally ON and one normally OFF), and a socket and plug provided for connecting the 24 VAC to the Recora Switchmat or Sensi-Switch.

Item #: CB1R / Size: 4.0 x 5.0 x 3.0 in / Weight: 3 lbs /Current Capacity: 15A

Recora Chair Occupancy Sensor / Seat Kill Switch



Recora Thin Mat / Seat Kill switch— Recora Chair Occupancy Sensors have been designed for use in seats and other applications which require standalone presence detection. Chair Occupancy Sensors are 3/16" thick and provides 11" x 11" coverage. Includes 2-wire connection and 2' leads. 4-wire connection available. Standard Part #: 1111-TM (pictured). **Rugged Application** (-RA) has a grey or blue vinyl top. Rugged Application with 10' Lead Part # Example: 1111-TM-RA-GREY-10'L

See page 14 for part numbers and options.

Recora Safety Mat Controllers, Auto Alert, Sensi-Switch

Available Products & Custom Configurations

FSC Safety Controllers

Model #	Dimensions	Weight	Description	Voltage
FSC-6R-120V	1.75" x 3" x 4.75"	1 lb.	Safety Relay, force guided contacts, 115V AC, DIN rail mountable	115 VAC
FSC-6-1Z-120V	8" x 8" x 4"	15 lb.	1 Zone Failsafe Controller box	115 VAC
FSC-6-2Z-120V	10" x 8" x 6"	18 lb.	2 Zone Failsafe Controller box	115 VAC
FSC-6-3Z-120V	14" x 8" x 6"	22 lb.	3 Zone Failsafe Controller box	115 VAC
FSC-6-4Z-120V	14" x 8" x 6"	1 lb.	4 Zone Failsafe Controller box	115 VAC
FSC-6R-24V	0.875" x 3.75" x 4.50"	1 lb.	Safety Relay, force guided contacts, 24V DC, DIN rail mountable	24 VDC
FSC-6-1Z-24V	8" x 8" x 4"	1 lb.	1 Zone Failsafe Controller box	24 VDC
FSC-6-2Z-24V	10" x 8" x 6"	1 lb.	2 Zone Failsafe Controller box	24 VDC

Auto Alert Mats - Vehicle detection sensor

Auto Alerts are totally enclosed, Built to IP67 standards, molded to 3/16" steel base plate, 7/8" thick, supplied with 10' lead. 16awg type SJT 2-conductor cable, 300 volt. Additional leads up to 150'. Add a -xxx'L to the part number to specify a custom lead length.

Model #	Dimensions	Weight	Description	Std Color
N3-240	3" x 24"	7 lb.	Auto Alert mat, molded to 3/16" base plate, 7/8" thick, 10' lead	Black
N3-320	3" x 32"	8 lb.	Auto Alert mat, molded to 3/16" base plate, 7/8" thick, 10' lead	Black
N-170	5" x 17"	13 lb.	Auto Alert mat, molded to 3/16" base plate, 7/8" thick, 10' lead	Black
N-240	5" x 24"	15 lb.	Auto Alert mat, molded to 3/16" base plate, 7/8" thick, 10' lead	Black
N-240TC	5" x 24"	15 lb.	Auto Alert mat with traction control, molded to 3/16" base plate, 7/8" thick, 10' lead	Black
N3-320	5" x 32"	18 lb.	Auto Alert mat, molded to 3/16" base plate, 7/8" thick, 10' lead	Black
N-320TC	5" x 32"	18 lb.	Auto Alert mat with traction control, molded to 3/16" base plate, 7/8" thick, 10' lead	Black
N-480	5" x 48"	25 lb.	Auto Alert mat, molded to 3/16" base plate, 7/8" thick, 10' lead	Black
N-600	5" x 60"	35 lb.	Auto Alert mat, molded to 3/16" base plate, 7/8" thick, 10' lead	Black
N-720	5" x 72"	45 lb.	Auto Alert mat, molded to 3/16" base plate, 7/8" thick, 10' lead	Black
N-1024	10" x 24"	22 lb.	Auto Alert mat, molded to 3/16" base plate, 7/8" thick, 10' lead	Black

Sensi-Switch

Std. Part # configuration: _____ - _____ i.e T-840-2'L (84" long, Standard color Black, Standard 2' 2-wire lead)

(Std. 2' lead included)

a b

Custom Configuration: _____ - _____ - _____ - _____ - _____

i.e. T-360-40'L-Y-4C-50

T-360 - 40'L - 4C - Y - IS
a b c d e

(36" long, Custom 40 foot lead, (2) 2 wire single cable lead for safety applications, Safety Yellow color. Conforms to Intrinsically Safe standards.)

a				b		c		d	
Model #	Width	Length	Std. Lead Length	Custom Lead Length (ft). (Up to 100')	Standard Conductor	Custom 4 wire Safety lead	Alternate Color (Yellow / Red)	Weight	
T-120	1"	12"	2'L	- __'L	2 wire, 2'	-2C or -4C	-Y or -R	1 lb	
T-240	1"	24"	2'L	- __'L	2 wire, 2'	-2C or -4C	-Y or -R	1 lb	
T-360	1"	36"	2'L	- __'L	2 wire, 2'	-2C or -4C	-Y or -R	2 lb	
T-480	1"	48"	2'L	- __'L	2 wire, 2'	-2C or -4C	-Y or -R	2 lb	
T-720	1"	72"	2'L	- __'L	2 wire, 2'	-2C or -4C	-Y or -R	3 lb	
T-840	1"	84"	2'L	- __'L	2 wire, 2'	-2C or -4C	-Y or -R	3 lb	
T-960	1"	96"	2'L	- __'L	2 wire, 2'	-2C or -4C	-Y or -R	4 lb	
T-1080	1"	108"	2'L	- __'L	2 wire, 2'	-2C or -4C	-Y or -R	4 lb	
T-1200	1"	120"	2'L	- __'L	2 wire, 2'	-2C or -4C	-Y or -R	5 lb	

(e) Intrinsically safe (-IS)

Sensi-Track (ST) sold separately. (Length in inches).

Part # Example: ST-120

ST 120

Sensi-Track, 120" long.

a

Recora Chair Occupancy Sensor

[Standard part # example: 1111-TM] (11' x 11", 2' lead, 2-Wire, Blue Vinyl top)

Custom part # example: 1111-TM-4W-RA-GREY-50'L

Standard Model #	Width	Length	Std. Lead Length	Standard Conductor	Custom 4 wire conductor. Add:	Rugged Option. Add:	Rugged Application Color Options. Add:	Custom Lead (Up to 100')
1111-TM	11"	11"	2'L	2 wire	-4W	-RA	-BLUE or -GREY	-__'L

Recora Additional Data

RECORA SWITCHMATS are designed for low voltage operation, Class II N.E.C. circuit operation, 12 volt amperes at 24 volts AC or DC. Switch is single pole, single throw, normally open, momentary contact type. SWITCHMATS are 3/8 to 1/2" thick, completely molded, not laminated, to help prevent fluid entry. All **RECORA SWITCHMATS** are designed to activate with 10 to 15 lbs. of foot pressure. All 14HD Series SWITCHMATS comply with ANSI/RIA standards for robot guarding.

SWITCHMAT INFORMATION:

Series 12H and 30H SWITCHMATS:

- Includes a 10 ft., 18 gauge, 2-conductor lead.
- Corrugated top and molded ramp edge.
- Standard colors in black, brown, or yellow.

Series 15H SWITCHMATS:

- Standard with a 10 ft., 18 gauge, 2-conductor lead.
- Smooth top and molded ramp edge.
- Standard colors in black, brown, or yellow.

Series 14H/HD Aluminum Edge SWITCHMATS:

- Includes a 10 ft., 18 awg., 2-conductor lead (14H).
- 14HD (Safety Mat) Includes two SPT 2 conductor leads.
- Equipped with 2.000" ramp edging for outside borders, or 750" blunt edging for wall, post or recess, installation.
- Standard colors in black, brown, or yellow.
- Standard sensitivity is 10-15 lbs., corrugated top.

Series 14H/HD Optional Trim Kits:

- **1585** – conduit connector for lead exits
- **MSE** – 2.000" aluminum ramp edging for outside border
- **NE** – 1.500" aluminum mat connector
- **REM** – .750" aluminum blunt edge for wall, post or recess, installation

EHD (EXTRA HEAVY DUTY) SWITCHMATS:

- Includes a 20 ft., 18 gauge SPT 2-conductor lead. Two qty. 18/2 –wire leads for Safety applications (4 wire)
- Utilizes heavier gauge internal steel plates (16 awg) for both top and bottom electrodes.
- Designed for heavy equipment presence detection such as forklifts.
- Standard sensitivity is 20-24 lbs.

OPTIONAL LEAD CABLES

18-gauge 2-conductor lead cable. • 4-conductor lead cable • Intrinsically Safe Cable

*****LIMITED WARRANTY POLICY*****

SWITCHMATS are quality products manufactured by **RECORA** meeting all specifications and Engineering Department requirements.

All SWITCHMATS are guaranteed against defective workmanship or material for a period of 12 months* from the date of purchase. This warranty does not apply to SWITCHMATS that are damaged due to improper installation or other misuses.

The defective SWITCHMAT must be returned to **RECORA** (freight prepaid) where it will be inspected for defects. If the SWITCHMAT is found defective due to workmanship or material, it will be replaced.

This warranty is limited to the replacement of defective SWITCHMATS only and does not obligate **RECORA** to assume any liability for the expense involved in removing and/or replacing the defective SWITCHMAT.

Recora Switchmat®

For over 75 years Recora has manufactured and designed a full line of standard and custom electrical Switchmats and flexible pressure sensitive switches. Offering effective and reliable solutions to problems found in industrial environments wherever presence or absence detection is essential.

Used for Machinery Safety, Auto Industry, Automated Equipment and Personnel/Vehicle Detection. Consultants are available to assist you with your standard requirements or your most complex applications.

Standard Product Line: Switchmat, Sensi-Switch, Auto Alert, Controls and Footswitch.

Specializing in Custom-Design applications to suit individual requirements.

RECORA

Presence Detection & Safety products

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