# DIRT CONTROL ROLL-UP ENTRY MATS AND MAT FRAMES



# Surface Mounted and Recess Mounted Roll-Up Entry Mats for Commercial and Industrial Use

Latham have been designing and manufacturing entry mats to the highest level for over 30 years. The Latham range of Entry Mats have been specifically designed to facilitate dirt and water control.

Research indicates that over 70% of dirt, dust and moisture, in regular occurrences and uses, enters a building via foot and wheeled traffic. These contaminants cause damage and wear on floor finishes, increase cleaning and maintenance costs, reduce the life cycle of the entrance flooring and can also cause pedestrian safety issues like slips or falls. For these reasons, it is imperative that a suitable dirt control flooring system be considered for commercial and high traffic entrances.

The Latham Entry Mat systems consist of extruded aluminium tread rails which carry factory installed infills of either abrasive for slip resistance, carpet for dirt control or vinyl for limited slip resistance and dirt control. The systems are continuously hinged with neoprene joints which reduce traffic noise and rattle.

The easy to install, versatile roll up mat, either recessed or surface mounted, has many commercial and industrial applications. In entry ways or in service areas of apartments, offices, hotels, motels, retail shops, malls, restaurants, bars, schools, churches, factories.

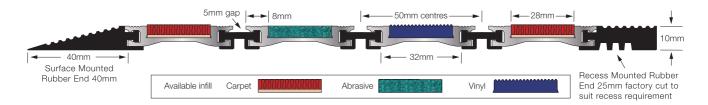
The unique neoprene hinge design allows easy roll up and eliminates metal to metal contact and corrosion lock up. Factory perforated 12mm x 4mm elongated slots in the neoprene hinge ensures dirt, moisture and debris is directed under the mat for future collection. Systems that are slot free, may remove moisture and dirt from shoes, but without the slots to control the dirt, these contaminants are tracked across the mat onto the floor.

Mats can be vacuumed over or easily rolled back to remove collected soil and moisture from beneath.

# **GENERAL INFORMATION**



#### STANDARD DIMENSIONS



# AVAILABLE CONFIGURATIONS: FLOOR MAT WIDTH "A", FLOOR MAT LENGTH "B" (DIRECTION OF TRAVEL)

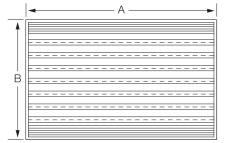
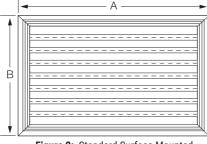
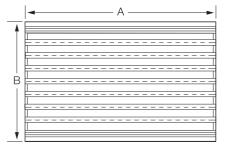


Figure 1: Standard Recess Mounted.



**Figure 2:** Standard Surface Mounted with 4 bevelled edges.



**Figure 3:** Standard Surface Mounted with 2 bevelled edges for applications where side entry is not possible.

Special Note: Mats must be rolled up before moving. They must not be dragged.

# **METAL FINISHES, INSERTS & COLOURS**



The system consists of an extruded aluminium tread rail which carries factory installed inserts of either abrasive for slip resistance, carpet for dirt control or vinyl for limited slip resistance and dirt control.

## **ALUMINIUM TREAD RAILS IN CLEAR, BRIGHT GOLD & BRONZE ANODISED**

Standard finish is clear anodised. Clear anodised finish will be supplied unless otherwise specified. Bright gold anodised and

bronze anodised are available as optional stock colours.



# **TREAD RAIL INSERTS & COLOURS**



## SUPAGRIT ABRASIVE INSERT FOR SLIP RESISTANCE - RSA/SSA COLOUR RANGE

Supagrit™ for slip resistance. Tread rail infill shall have continuous Latham Supagrit Slip Resistant Abrasive Surface. Colours to be selected from Latham Australia's standard colour range.

Standard Supagrit abrasive insert colour is silver grey. Standard insert colour will be supplied unless otherwise specified.



infill temporarily glows in the dark after exposure to artificial or natural light.

## CARPET INSERT FOR DIRT CONTROL - RDCC/SDCC COLOUR RANGE

Carpet for dirt control. Tread rail insert shall be 100% nylon fibre face carpet. Carpet is unitary fusion bonded to guard against fraying, delamination or moisture penetration. Carpet to be positively locked into extruded aluminium tread rails.

Colours to be selected from Latham Australia's standard colour range. Standard carpet insert colour is grey. Standard insert colour will be supplied unless otherwise specified.



## VINYL INSERT FOR LIMITED SLIP RESISTANCE & DIRT CONTROL - RDCV/SDCV COLOUR RANGE

Vinyl for limited slip resistance and dirt control. Tread rail infill shall have continuous Latham Ribbed Vinyl Surface. Colours to be selected from Latham Australia's standard colour range. Standard vinyl insert colour is grey. Standard insert colour will be supplied unless otherwise specified. Note: RDCV and SDCV should not be considered for external applications or application in direct sunlight.



GREY







# **RECESS MOUNTED ENTRY MATS**



Latham's Range of recess mounted entry mats are designed to sit in a mat well and be flush with the surrounding floor finish. These mats should be considered over surface mounted mats where possible.

A frame helps protect the edges of the surrounding floor finish from damage that may be caused by wheeled traffic and other pressures that may come in contact with the exposed floor finish edge.

Lathams recommend that entry mats are installed in surround frames as detailed on page 8.

Latham can supply block-out or cast-in frames for our recessed entry mats as detailed on page 8.

The integrated neoprene hinging system in the Latham range of Entry Mats not only limits noise and vibration, and controls water and dirt, it also acts as a brake on the surface mounted mats ensuring any tracking due to one directional large volumes of traffic is limited.

The systems are available in 3 insert types as detailed below. For style and colour range details see page 5.



## TYPE RDCC: CARPET INSERT FOR DIRT CONTROL

- Recess mounted with carpet insert.
- Standard insert colour grey will be supplied unless otherwise specified.

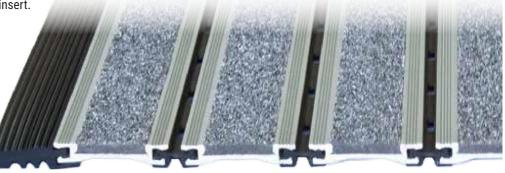
**RUST CARPET INSERT SHOWN** 



## TYPE RSA: SUPAGRIT ABRASIVE INSERT FOR SLIP RESISTANCE

Recess mounted with Supagrit abrasive insert.

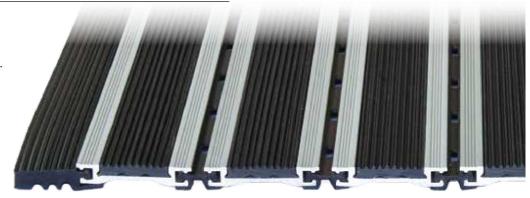
Standard insert colour silver grey will be supplied unless otherwise specified.



SILVER GREY SUPERGRIT **INSERT SHOWN** 

## TYPE RDCV: VINYL INSERT FOR SLIP RESISTANCE & DIRT CONTROL

- Recess mounted with vinyl insert.
- Standard insert colour grey will be supplied unless otherwise specified.



**BLACK VINYL INSERT SHOWN** 

# **SURFACE MOUNTED ENTRY MATS**



Latham's Range of surface mounted entry mats are supplied standard with ramped/tapered edges on all 4 sides. This means that traffic can approach from any direction without the possibility of tripping over the raised mat.

When the mats are being installed between 2 walls they can be supplied with the front and back ramped/tapered strips only.

The integrated neoprene hinging system in the Latham range of Entry Mats not only limits noise and vibration, and controls water and dirt, it also acts as a brake on the surface mounted mats ensuring any tracking due to one directional large volumes of traffic is limited.

The systems are available with 3 insert types as detailed below. For style and colour range details see page 5.

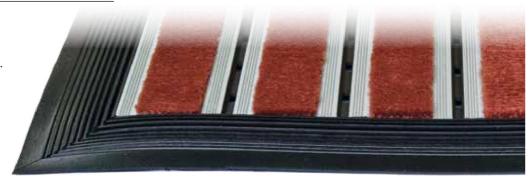


## TYPE SDCC: CARPET INSERT FOR DIRT CONTROL

- Surface mounted with carpet insert.
- Standard insert colour grey will be supplied unless otherwise specified.

RAMPED 4 SIDES STANDARD. 2 SIDES ON REQUEST [SPECIFY].

**RUST CARPET INSERT SHOWN** 

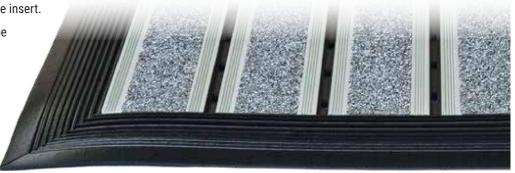


## TYPE SSA: SUPAGRIT ABRASIVE INSERT FOR SLIP RESISTANCE

- Surface mounted with Supagrit abrasive insert.
- Standard insert colour silver grey will be supplied unless otherwise specified.

RAMPED 4 SIDES STANDARD. 2 SIDES ON REQUEST [SPECIFY].

SILVER GREY SUPAGRIT INSERT SHOWN

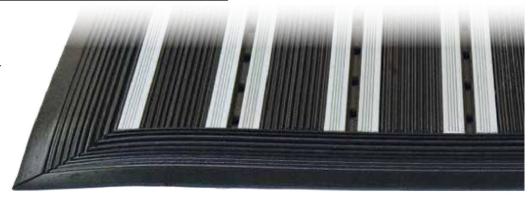


# TYPE SDCV: VINYL INSERT FOR SLIP RESISTANCE & DIRT CONTROL

- Surface mounted with vinyl insert.
- Standard insert colour grey will be supplied unless otherwise specified.

RAMPED 4 SIDES STANDARD. 2 SIDES ON REQUEST [SPECIFY].

**BLACK VINYL INSERT SHOWN** 



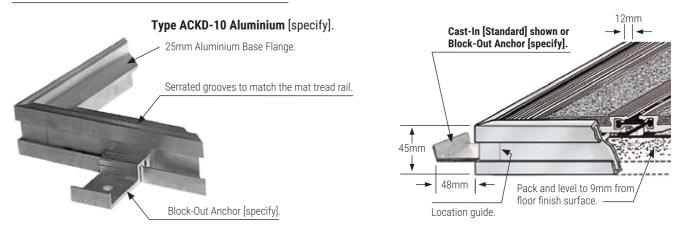
# **BLOCK-OUT & CAST-IN MAT FRAMES**

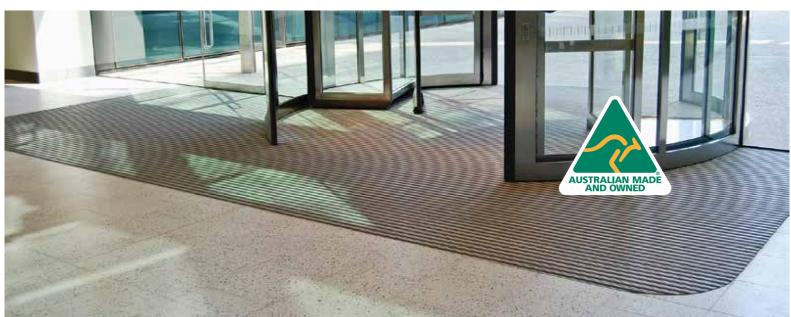


- Mat frames must be level filled to mat depth with levelling compound or cement mix.
- ▶ The mat must be fully supported on a level surface.
- For correct installation, all mat frames should be delivered with the mats.
- All standard aluminium mat frames are supplied in clear anodised finish. All other frames will be supplied mill finish.
- ► AAF Aluminium and BAF Brass Angle Frames [Block-Out] will be supplied with mitre cut ends for site butting and adjusting.
- Frames will be supplied complete with countersunk holes in the base of the frame, and screws and plugs.
- ➤ The ACKD-10 Frame [Cast-In] will be supplied with location guides that can be screwed, or riveted through to facilitate easier setup on site.



# **TYPE ACKD-10 CAST-IN ALUMINIUM FRAME**





# **ORDERING DETAILS**



#### **ORDERING DETAILS - MATS**

Furnish and install entry mats to the following specification, as supplied by Latham Australia Pty Ltd.

www.latham-australia.com, ph: +612 9879 7888,

fax: +612 9879 7666, email: info@latham-australia.com

Latham Roll-Up \*[RDCC-recessed carpet] / [RSA-recessed abrasive] / [RDCV-recessed vinyl] / [SDCC-surface mounted carpet] / [SAA-surface mounted abrasive] / [SDCV-surface mounted vinyl] entry mat (A)...... x (B)...... in colour..... (grey standard), aluminium to be \*[standard clear anodised] / [bright gold anodised] / [bronze anodised].

\*Delete that which does not apply.

# **ORDERING DETAILS - FRAMES**

Furnish and install entry mat frames to the following specification, as supplied by Latham Australia Pty Ltd. www.latham-australia.com, ph: +612 9879 7888, fax: +612 9879 7666, email: info@latham-australia.com

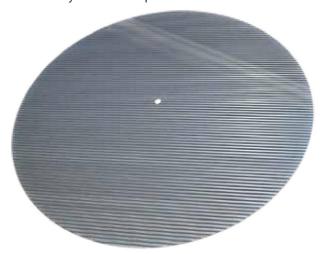
Entry Mat Frame Type \*[AAF-aluminium (standard)] / [BAFbrass], size \*[12 x 12 x 3mm (standard)] / [15 x 15 x 3mm] / [20 x 20 x 3mm] / [25 x 25 x 3mm] / [50 x 50 x 3mm]. **Entry Mat** Frame Type [ACKD-10 aluminium cast-in place 45 x 90 x 12mm].

\*Delete that which does not apply.

# **SPECIAL NOTE**

Where recessed mats are to be installed in direct sunlight, special consideration should be given to the thermal coefficient of linear expansion of the metal, which is approximately 0.25mm per lineal metre of metal per 10 degrees Celsius in temperature change of the metal (note temperature change in the metal surface can be as dramatic 50°C+ depending on the location). All mats will be manufactured under frame size, when Latham's supply the frame. Generally the mat will be 3-4mm smaller than the internal frame size to allow for fitting and cleaning. This will be increased for larger mats to allow for linear expansion of the metal.

In these direct sunlight applications, Lathams also recommend the slip-resistant abrasive or dirt control carpet insert as vinyl inserts have a higher propensity to expand and contract. Please discuss with your Latham representative.



# COMPONENT SPECIFICATIONS



# CONSTRUCTION

A series of aluminium tread rails are spaced at 50mm centres and connected by a continuous neoprene hinge with uniform perforations to allow the effective control of water and small debris. Treads should run counter to walking direction, with tread surfaces to be either carpet, abrasive or vinyl. Available in recessed style for installation into surround frame, or surface mounted.

#### **FINISH**

Aluminium tread rails and frames are fabricated from 6063-T6 alloy. Tread rails will be supplied in clear anodised standard finish or optional gold anodised or bronze anodised on request. Standard AAF aluminium frames will be supplied in clear anodised finish whilst all other frames will be supplied in mill finish. Anodised, other custom or non-stocked metal colours may be available by request at additional delay and charge.

## TREAD RAIL INSERT TYPES

#### Carpet

Tread rail infill shall be 100% nylon fibre face carpet. Carpet is unitary fusion bonded to guard against fraying, delamination or moisture penetration. Carpet to be positively locked into extruded aluminium tread rails. Colours to be selected from Latham Australia's standard colour range.

#### **Abrasive**

Tread rail infill shall have continuous Latham Supagrit™ Slip Resistant Abrasive Surface. Colours to be selected from Latham Australia's standard colour range.

Tread rail infill shall have continuous Latham Ribbed Vinyl Surface. Colours to be selected from Latham Australia's standard colour range.

#### **MAINTENANCE**

Vacuum for dirt control. This can be as simple as vacuuming over the mat. From time to time Latham's suggest rolling up the entry mats and cleaning out the well, which will have trapped dirt, moisture and debris, that has been collected by the mat.

All Latham entry mats should be washed from time to time using Latham Gold Chem Mat Wash 22XX. This is designed specifically for use with the mats, will not harm the inserts or aluminium extrusions, and will invigorate the inserts and mat finishes.

#### Note:

Mats must be rolled up before moving, they must not be dragged.

# **SLIP RESISTANT TESTING & FIRE TESTING – ENTRY MATS**



Latham Australia strive to keep on top of the requirements for new and changing standards. We run internal wear and colour fastness tests on a regular basis and slip resistance and fire tests have been carried out on all of our entry mat systems.

# NATA ACCREDITED INDEPENDENT LABORATORY TESTING

Latham Australia Pty Ltd has had independent testing carried out by a NATA accredited laboratory in Accordance with AS 4586-2013 Slip resistance classification of new pedestrian surface materials - Appendix A

#### Classification of Pedestrian Surface Materials According to the AS 4586 Wet Pendulum Test

Class	Pendulum SRV (see note 1)			
	Slider 96	Slider 55		
P5	>54	>44		
P4	45-54	40-44		
P3	35-44	35-39		
P2	25-34	20-39		
P1	12-24	<20		
P0	<12			

#### Notes:

- 1. While slider 96 or slider 55 rubbers may be used, the test report shall specify the rubber that was used.
- 2. It is expected that these surfaces will have greater slip resistance when dry.
- SDV may be calculated by using the tables that are given in Appendix F, and the minimum SRV that is considered appropriate for a level surface (see examples given in Appendix F).

Adapted from AS 4586-2013 Table 2

#### The established results are detailed as follows:

# **Latham Recess and Surface Mounted Dirt Control Carpet Entry Mats**

Slip Resistance Value (SRV) - Slider 55: 63

Classification according to Appendix A: P5

# Latham Recess and Surface Mounted Dirt Control Vinyl Entry Mats

▶ Slip Resistance Value (SRV) - Slider 55: 34

Classification according to Appendix A: P2

Slip Resistance Value (SRV) - Slider 55: 43\*

Classification according to Appendix A: P4\*

# Latham Recess and Surface Mounted Dirt Control Abrasive Entry Mats

Slip Resistance Value (SRV) - Slider 55: 46

Classification according to Appendix A: P5

\*Testing was conducted in the direction of travel.

All Latham Recess and Surface Mounted Entry Mats with carpet inserts, silicon carbide mineral slip resistant inserts and vinyl inserts have been independently tested by AWTA Product Testing in accordance with AS ISO 9239.1-2003 Part 1 for a determination of the Burning Behaviour using a Radiant Heat Source. See certified AWTA Product Testing certificates below.

# AWTA PRODUCT TESTING - BURNING BEHAVIOUR USING A RADIANT HEAT SOURCE

#### **RDCC/SDCC Results**

- Sample Identification: Latham RDCC/SDCC Entry Mats with Carpet Inserts.
- Average Critical Radiant Flux/Critical Heat Flux: 10.5 kW/m2.
- Average smoke value: 176% min.

#### **RDCV/SDCV Results**

- Sample Identification: Latham RDCV/SDCV Entry Mats with Vinyl Inserts.
- Average Critical Radiant Flux/Critical Heat Flux: 9 kW/m2.
- Average smoke value: 386% min.

#### **RSA/SSA Results**

- ► Sample Identification: Latham RSA/SSA Entry Mats with Supagrit™ Silicon carbide Inserts.
- Average Critical Radiant Flux/Critical Heat Flux: 6.7 kW/m2.
- Average smoke value: 658% min.

For full test results these certificates are available at www.latham-australia.com in downloadable PDF format.



# **DYNAMIC LOAD TESTING – ENTRY MATS**



Latham Dirt Control Roll-up Entry Mats and Mat Frames have undergone dynamic load testing. This involves placing a certain load onto a trolley and pushing the loaded trolley over the samples 20 times in dual-directions over the same location. This simulates the movement of pedestrian traffic and wheels of a travel bag or trolley back and forth through an entrance.

The deflection was then recorded, with test results in the table below. The test samples were found in satisfactory condition as there was no observable physical damage, with all dimensions remaining mainly unchanged. Full testing can be obtained by contacting Latham Australia.

	RDCC/SDCC		RDCV/SDCV		RSA/SSA	
Load (kN)	Deflection (mm)	Percentage Change (%)	Deflection (mm)	Percentage Change (%)	Deflection (mm)	Percentage Change (%)
0.5	0.28	1.64	0	0	0	0
1	0.31	1.85	0.15	0.95	0.02	0.14
1.5	0.39	2.34	0.24	1.59	0.08	0.55
2	0.46	2.94	0.23	1.55	0.153	1.08
2.5	0.58	3.76	0.36	2.45	0.21	1.5



