**6612AL**

**ALUMAT ENTRANCE MATS**

**1**

**GENERAL**

This section relates to the supply and installation of **Alumat** entrance mats.

It includes:

* custom-made aluminium entrance matting systems.
* custom-made entrance matting systems with closed draining channels.
* custom-made entrance matting systems with open draining channels.
* associated trims and frames.
* **Alumat** modular entrance matting systems. Modul and Modulock 15.

1.1

RELATED WORK

Refer to ~ for ~.

**Documents**

1.2

DOCUMENTS

Refer to the general section 1233 REFERENCED DOCUMENTS.  The following documents are specifically referred to in this section:

|  |  |
| --- | --- |
| [NZBC C](http://www.masterspec.co.nz/redirect.aspx?pl=224)/AS2 | Protection from fire |
| ISO 9239.1 | Reaction to fire tests for floorings – Determination of the burning behaviour using a radiant heat source. |
| [AS/NZS 2455.1](http://www.masterspec.co.nz/redirect.aspx?pl=466) | Textile floor coverings – Installation practice – General |

1.3

MANUFACTURER/SUPPLIER DOCUMENTS

Manufacturer’s and supplier’s documents relating to this part of the work:

ALUMAT data sheets. https://www.alumat.co.nz/product-range/

ALUMAT Installation Guide See https://www.alumat.co.nz/installation-guildlines/

ALUMAT Maintenance Guide See <https://www.alumat.co.nz/maintenance-guide/>

ALUMAT Drainage system installation. See https://www.alumat.co.nz/wp-content/uploads/2024/01/ALUMAT-DRAINAGE-INSTALLATION-Guide-October-2023-1.pdf

Manufacturer/supplier contact details:

|  |  |
| --- | --- |
| Company: | **Alumat Flooring Solutions** |
| Post Web: | PO Box 89-018. Torbay, Auckland 0742www.alumat.co.nz |
| Email: | info@alumat.co.nz |
| Telephone: | 0800 ALUMAT (0800 258 628) |

**Warranties**

1.4

WARRANTY – MANUFACTURER/SUPPLIER

Provide a material manufacturer/supplier warranty:

|  |  |
| --- | --- |
| 5 years: | Alumat 10I, Alumat 10D & Alumat 10DO frames, and matting infills for aluminium matting and Modul tiles.Alumat Modul and Modulock 15 modular tile systems. |
| 10 years | Modul Modular tile bases, Alumat 10 W. Alumat 10WD and Alumat 10 WDO frames. |
| 20 years | Alumat 15I, Alumat 15D, Alumat 15DO and Alumat 15WD frames |

* Provide this warranty on **Alumat Flooring Solutions** standard form.
* Commence the warranty from practical completion.

Refer to the general section 1237 WARRANTIES for additional requirements.

1.5

WARRANTY – INSTALLER/APPLICATOR

Provide an installer warranty:

|  |  |
| --- | --- |
| 1 year: | For installation |

* Provide this warranty on the installer standard form.
* Commence the warranty from the date of Practical Completion of the contract works.

Refer to the general section 1237 WARRANTIES for additional requirements.

1.6

NO SUBSTITUTIONS

Substitutions are not permitted to any specified system, or associated components and products.

1.7

QUALIFICATIONS – MATTING INSTALLER

Entry mat system installers to be competent, experienced workers familiar with the materials and techniques specified.

1.8

MOISTURE CONTENT OF CONCRETE SLAB FOR RIBBED CARPET

Concrete slab is to be cured and dried to a relative humidity not exceeding 75% or until the moisture content does not exceed 5.5%, in accordance with [AS/NZS 2455.1](http://www.masterspec.co.nz/redirect.aspx?pl=466), refer to section 6192 FLOORING SUBSTRATE PREPARATION.

**Performance**

1.9

SURFACE FIRE PERFORMANCE

**Alumat Flooring Solutions** flooring tested to ISO 9239.1 and achieve the minimum critical radiant flux requirements of [NZBC C](http://www.masterspec.co.nz/redirect.aspx?pl=224)/AS2, Table 4.5, Critical radiant flux requirements for flooring.  Refer to Selections.

1.10

WATER ABSORPTION

**Alumat** rib infill is impervious to water.

**2**

**PRODUCTS**

2.1

INFILLS – ENTRY MAT SYSTEM

To ISO 9239.1.  Infills 100% air-entangled polypropylene with fire retardant backing.  1720g/m², pile thickness 4mm, overall pile height 10mm.

2.2

BASE FRAMES – ENTRY MAT SYSTEM

Exterior grade satin anodized 6063-T5 magnesium alloy, with full rubber backing.

**Entry mat system: 10mm Non-Draining – recessed or surface mounted**

2.3

ALUMAT 10 I ENTRY MAT

Heavy duty aluminium and infill entrance mat with sealed rubber base.  Mat depth 10mm, infill width 30mm.  Use in covered or weather protected areas.  Mat is fully interlocking, complex shapes can be seamlessly jointed.  Refer to SELECTIONS.

**Entry mat system: 10mm Closed drain channels – recessed or surface mounted**

2.4

ALUMAT 10 D ENTRY MAT

Heavy duty aluminium and infill entrance mat with closed water draining channels and sealed full rubber base.  Mat depth 10mm, infill width 30mm alternating with water drain channels.  Use in covered weather protected or exposed areas.  Mat is fully interlocking, complex shapes can be seamlessly jointed.  Refer to SELECTIONS.

**Entry mat system: 10mm Draining – recessed**

2.5

ALUMAT 10 DO ENTRY MAT

Heavy duty aluminium and infill entrance mat with open water draining channels and sealed full rubber base.  Mat depth 10mm, infill width 30mm alternating with water drain channels.  Use in areas where surface water needs to be collected and removed. Install over grating. For design guide lines see https://www.alumat.co.nz/wp-content/uploads/2024/01/ALUMAT-DRAINAGE-INSTALLATION-Guide-October-2023-1.pdf Refer to SELECTIONS.

**Entry mat system: 10mm Non-Draining – recessed or surface mounted**

2.6

ALUMAT 10 W ENTRY MAT

Extra heavy duty aluminium with wider infill entrance mat with sealed full rubber base.  Mat depth 10mm, infill width 50mm.  Use indoors or in covered weather protected areas.  Mat is fully interlocking, complex shapes can be seamlessly jointed.  Refer to SELECTIONS.

**Entry mat system: 10mm Closed drain channels– recessed or surface mounted**

2.7

ALUMAT 10 WD ENTRY MAT

Extra heavy duty aluminium and wider infill entrance mat with water draining channels and sealed full rubber base.  Mat depth 10mm, infill width 50mm alternating with water drain channels.  Use in covered weather protected or exposed areas.  Mat is fully interlocking, complex shapes can be seamlessly jointed.  Refer to SELECTIONS.

**Entry mat system: 10mm Draining – recessed**

2.8

ALUMAT 10 WDO ENTRY MAT

Heavy duty aluminium and wider infill entrance mat with open water draining channels and sealed full rubber base.  Mat depth 10mm, infill width 50mm alternating with water drain channels.  Use in areas where surface water needs to be collected and removed. Install over grating. For design guide lines see https://www.alumat.co.nz/wp-content/uploads/2024/01/ALUMAT-DRAINAGE-INSTALLATION-Guide-October-2023-1.pdf Refer to SELECTIONS.

**Entry mat system: 15 – 20mm - Recessed only**

2.9

ALUMAT 15 I ENTRY MAT

Extra heavy duty aluminium and infill entrance mat with elevated infills.  Mat depth 15mm,-20mm with variable depth full rubber backing, infill width 30mm.  Use indoors or in covered weather protected areas.  Mat is fully interlocking; complex shapes can be seamlessly jointed.  Refer to SELECTIONS.

**Entry mat system – 15mm – 20mm Closed Draining – recessed only**

2.10

ALUMAT 15D ENTRY MAT

Extra heavy duty aluminium and infill entrance mat with elevated infills and water draining channels that can be discharged to under-mat drainage points.  Mat depth 15 – 20mm with variable depth full rubber backing, infill width 30mm alternating with water drain channels.  Use in covered or outdoor weather-exposed areas.  Mat is fully interlocking, complex shapes can be seamlessly jointed.  Refer to SELECTIONS.

2.11

ALUMAT 15 WD ENTRY MAT

Extra heavy duty aluminium and infill entrance mat with water draining channels.  Mat depth 15mm, infill width 50mm alternating with water drain channels.  Use in covered or outdoor weather exposed areas.  Mat is fully interlocking, complex shapes can be seamlessly jointed.  Refer to SELECTIONS.

**Entry mat system – 15 – 20mm Draining – recessed only**

2.12

ALUMAT 15 DO ENTRY MAT

Heavy duty aluminium and infill entrance mat with open water draining channels and sealed full rubber base.  Mat depth 15mm, infill width 30mm alternating with water drain channels.  Use in areas where surface water needs to be collected and removed. Install over grating. For design guide lines see https://www.alumat.co.nz/wp-content/uploads/2024/01/ALUMAT-DRAINAGE-INSTALLATION-Guide-October-2023-1.pdf Refer to SELECTIONS.

**Entry mat system – Modul Modular Matting System**

2.13

ALUMAT MODUL MODULAR MATTING SYSTEM

Modular polypropylene infill in PVC tile interconnecting tile entrance matting system for installation into shallow recess (10mm) or surface mounted with Modul interconnecting perimeter ramping.  For inside zones.  Tiles 500mm x 250mm x 10mm,  incorporating rigid scraper bars, water collection channels and polypropylene or polyamide infill strips.

2.14

ALUMAT MODULOCK 15 MODULAR MATTING SYSTEM

Modular polypropylene infill in PVC tile interconnecting tile entrance matting system for installation into mat well. For inside zones ideally suited for large commercial entrance ways. Tiles 440mm x 290mm x 14mm.

**Components**

2.15

FIXINGS – FOR ENTRY MAT SYSTEM TO SUBSTRATE

Use stainless steel, screws or masonry anchors, suitable for substrate and entry mat system thickness.

**Accessories**

2.16

SEALER – SEALING SUBSTRATE

Sealer suitable for sealing the particular substrate under entry mat system.  Refer to SELECTIONS.

2.17

FLOORING TRIM – FOR VEBE FR RIB CARPET

Proprietary aluminium matwell frame sections, to match selected mat type, from 15 micron satin anodised 6063-T5 magnesium alloy.  Heights 8mm, 10mm, 12mm, 15mm and 20mm.  Refer to SELECTIONS.

2.18

OPTIONAL RAMP FOR MODUL MODULAR MAT TILES

Propriety PVC ramp sections provide height transition for surface mounted Modul entrance matting system.  Four different side ramp sections and one corner section enable Modul mats for full tiles to be ramped on some or all sides as required.

**3**

**EXECUTION**

**Conditions**

3.1

INSPECTION

Before starting work inspect the substrate to ensure that it will allow work of the required standard.

3.2

PROTECTION

Protect adjoining work surfaces and finishes during the installation.

3.3

LAYOUT

Plan the general layout to conform with size and orientation requirements.

3.4

TEMPERATURE

|  |  |
| --- | --- |
| Floor temperature: | Minimum 16°C. |
| Concrete pH: | No more than 10.0. |

3.5

HANDLE AND STORE

Keep matting dry.  Protect from damage.

**Installation – substrate preparation**

3.6

PREPARE FLOOR SUBSTRATE

Refer to 6192 FLOORING SUBSTRATE PREPARATION for preparation of flooring substrate.

Ensure base is smooth and level before commencing installation.

3.7

PREPARE FLOOR SUBSTRATE – DRAINED

Refer to 6192 FLOORING SUBSTRATE PREPARATION for preparation of flooring substrate.

Ensure base is smooth and level, and drain/drainage channels clear, before commencing installation.

**Installation**

3.8

INSTALL ENTRY MAT SYSTEM

Install entry mat system in recess, in accordance with **Alumat** details and requirements.  Refer to SELECTIONS.

3.9

INSTALL ENTRY MAT SYSTEM WITH PRE-FITTED RAMPING

Install entry mat system with pre-fitted extruded aluminium ramping, in accordance with **Alumat** details and requirements.  Refer to SELECTIONS.

3.10

INSTALL ENTRY MAT SYSTEM WITH DRAINAGE CHANNELS IN RECESS

Install entry mat system in recess, in accordance with **Alumat** details and requirements.  Refer to SELECTIONS.

3.11

INSTALL ENTRY MAT SYSTEM WITH DRAINAGE CHANNELS & PRE-FITTED RAMPING

Install entry mat system with pre-fitted ramping, in accordance with **Alumat** details and requirements.  Refer to SELECTIONS.

3.12

INSTALL MODUL ENTRANCE MATTING SYSTEM

Install Modul entry matting system in accordance with **Alumat** details and requirements.  Refer to SELECTIONS.

**Completion**

3.13

REPLACE

Replace damaged or marked matting or frame.

3.14

LEAVE

On completion of the installation thoroughly vacuum the finished matting.  Leave surfaces and recess, free of adhesive, dirt and debris and to the standard required by following procedures.

3.15

REMOVE

Remove debris, unused materials and elements from the site.

3.16

PROTECT

Protect completed work from damage for the period between completion of installation and completion of the contract works.

**4**

**SELECTIONS**

For further details on selections go to [www.alumat.co.nz](https://www.alumat.co.nz/)

Substitutions are not permitted to the following **Alumat** materials and/or associated components, unless stated otherwise.

**Entry mat system: 10mm Non-Draining (recessed or surface mounted)**

4.1

ALUMAT 10 I ENTRY MAT

|  |  |
| --- | --- |
| Location: | ~ |
| Manufacturer: | **Alumat** |
| Install/type: | ~ |
| Mat size: | ~ |
| Critical radiant flux: | ≥4.9kW/m² |
| Aluminium colour: | To match matting insert |
| Matting colour: | SELECT -Black, silver, brown, red, sisal |

4.2

ALUMAT 10 W ENTRY MAT

|  |  |
| --- | --- |
| Location: | ~ |
| Manufacturer: | **Alumat** |
| Install/type: | ~ |
| Mat size: | ~ |
| Critical radiant flux: | ≥4.9kW/m² |
| Aluminium colour: | To match matting insert |
| Matting colour: | SELECT -Black, silver, brown, red, sisal |

**Entry mat system: 10mm Closed Draining (recessed or surface mounted)**

4.3

ALUMAT 10 D ENTRY MAT

|  |  |
| --- | --- |
| Location: | ~ |
| Manufacturer: | **Alumat** |
| Install/type: | ~ |
| Mat size: | ~ |
| Critical radiant flux: | ≥4.9kW/m² |
| Aluminium colour: | To match matting insert |
| Matting colour: | SELECT -Black, silver, brown, red, sisal | Black, silver, brown, red, sisal |

4.4

ALUMAT 10 WD ENTRY MAT

|  |  |
| --- | --- |
| Location: | ~ |
| Manufacturer: | **Alumat** |
| Install/type: | ~ |
| Mat size: | ~ |
| Critical radiant flux: | ≥4.9kW/m² |
| Aluminium colour: | To match matting insert |
| Matting colour: | SELECT -Black, silver, brown, red, sisal |

**Entry mat system: 15mm Non draining (recessed only)**

**Entry mat system: 10mm Open Draining (recessed )**

4.5

ALUMAT 10 DO ENTRY MAT

|  |  |
| --- | --- |
| Location: | ~ |
| Manufacturer: | **Alumat** |
| Install/type: | ~ |
| Mat size: | ~ |
| Critical radiant flux: | ≥4.9kW/m² |
| Aluminium colour: | To match matting insert |
| Matting colour: | SELECT -Black, silver, brown, red, sisal |

**Entry mat system: 15mm Non draining (recessed only)**

4.6

ALUMAT 10 WDO ENTRY MAT

|  |  |
| --- | --- |
| Location: | ~ |
| Manufacturer: | **Alumat** |
| Install/type: | ~ |
| Mat size: | ~ |
| Critical radiant flux: | ≥4.9kW/m² |
| Aluminium colour: | To match matting insert |
| Matting colour: | SELECT -Black, silver, brown, red, sisal |

**Entry mat system: 15mm Non draining (recessed only)**

**Entry mat system: 15mm Non-Draining (recessed or surface mounted)**

4.7

ALUMAT 15 I ENTRY MAT

|  |  |
| --- | --- |
| Location: | ~ |
| Manufacturer: | **Alumat** |
| Install/type: | Recessed |
| Mat size: | ~ |
| Critical radiant flux: | ≥4.9kW/m² |
| Aluminium colour: | To match matting insert |
| Matting colour: | SELECT -Black, silver, brown, red, sisal |

**Entry mat system: 15mm Draining (recessed only)**

**Entry mat system: 15mm Closed Draining (install in mat well)**

4.8

ALUMAT 15 WD ENTRY MAT

|  |  |
| --- | --- |
| Location: | ~ |
| Manufacturer: | **Alumat** |
| Install/type: | Recessed |
| Mat size: | ~ |
| Critical radiant flux: | ≥4.9kW/m² |
| Aluminium colour: | To match matting insert |
| Matting colour: | SELECT -Black, silver, brown, red, sisal |

**Entry mat system: 15mm – 20mm Draining (recessed only)**

4.9

ALUMAT 15 D ENTRY MAT

|  |  |
| --- | --- |
| Location: | ~ |
| Manufacturer: | **Alumat** |
| Install/type: | Recessed |
| Mat size: | ~ |
| Critical radiant flux: | ≥4.9kW/m² |
| Aluminium colour: | To match matting insert |
| Matting colour: | SELECT -Black, silver, brown, red, sisal |

**Modular Matting System**

**Entry mat system: 15mm Open Draining (Install over grating)**

4.10

ALUMAT 15 DO ENTRY MAT

|  |  |
| --- | --- |
| Location: | ~ |
| Manufacturer: | **Alumat** |
| Install/type: | Recessed |
| Mat size: | ~ |
| Critical radiant flux: | ≥4.9kW/m² |
| Aluminium colour: | To match matting insert |
| Matting colour: | SELECT -Black, silver, brown, red, sisal |

**Entry mat system: 15mm – 20mm Draining (recessed only)**

4.11

ALUMAT MODUL MODULAR MATTING SYSTEM

|  |  |
| --- | --- |
| Location: | ~ |
| Supplier: | **Alumat** |
| Carpet type: | Vebe FR Rib or Polyamide infills |
| Install method: | Place full tiles and tap together |
| PVC base tile colour: | Black |
| Mat infil colour | ~ |
| Mat size: | Unlimited (cut edges possible) |
| Mat thickness: | Nominally 10mm |
| Mat orientation: | Stacker pattern or brick bond possible (without perimeter ramping) |
| Perimeter finish: | Set down or surface mounted with Modul ramped edges |
| Substrate: | Hard, rigid, and level |
| Sealer: | ~ |
| Adhesive: | N/A |
| Critical radiant flux | 4.3kW/m² |

4.12

ALUMAT MODULOCK 15 MODULAR MATTING SYSTEM

|  |  |
| --- | --- |
| Location: | ~ |
| Supplier: | **Alumat** |
| Carpet type: | Vebe FR Rib or Polyamide infills |
| Install method: | Place full tiles and tap together |
| PVC base tile colour: | Black / Grey |
| Mat infill colour | ~ |
| Mat size: | Unlimited (cut edges possible) |
| Mat thickness: | Nominally 14 mm.  |
| Mat orientation: |  |
| Perimeter finish: | Set down or surface mounted with Modulock ramped edges |
| Substrate | Hard, rigid, and level |
| Sealer: | ~ |
| Adhesive: | N/A |
| Critical radiant flux | 4.1kW/m² |

5.0

SPARES & MAINTENANCE PRODUCTS

Refer to the general section 1270 CONSTRUCTION for details of how spares and maintenance products will be handled.  Provide the following spares and maintenance products:

|  |  |
| --- | --- |
| Item: | ~ |
| Quantity: | ~ |
| Location: | Refer to 1270 CONSTRUCTION |

[Mail:](https://www.alumat.co.nz/masterspec-specification/)info@alumat.co.nz

[Phone:](https://www.alumat.co.nz/masterspec-specification/)0800 258 628