

# RR20 Multi-Purpose Matting

POLYURETHANE BOUND RUBBER GRANULATE MATERIAL



**Product Code:** 1247

JCW RR20 is a high performance, cost effective polyurethane bound rubber granulate material. RR20 is different to other products as it is both recyclable and yet will retain its acoustic properties throughout a long and maintenance free lifespan.

**Mat Dimensions:** 1m x 1m **Standard Thickness:** 20mm (other thicknesses available on request)  
**Weight:** RR20mm is 15.6 kgs/m<sup>2</sup>

**Maximum Load Bearing Capacity:** 0.05N/mm<sup>2</sup> (5000kgs/m<sup>2</sup>)  
**Temperature Resistance:** -40°C up to +110°C  
**Static Modulus of Elasticity\*:** 0.10 - 0.44N/mm<sup>2</sup>  
**Compression Set to DIN 53572\*\*:** Approx. 4.10%  
**Tensile Strength to DIN 53571:** Min 0.30N/mm<sup>2</sup>  
**Elongation at Break to DIN 53571:** Min 60%  
**Tear Resistance to DIN 53515:** Min 3.0N/mm  
**Flammability:** Class B2  
**Thermal Conductivity:** 0.14W/mK

\* Figures dependent upon load, natural frequency and material thickness

\*\* Measured 30 minutes after decompression with 50% deformation @ 23°C after 72 hours

JCW RR20 has a multitude of applications including: airborne wall improvement, impact and vibration reduction through floors and sound dampening of enclosures and panels. The product is therefore typically suitable for:

- **Airborne reduction:** through walls & floors
- **Impact reduction:** through floors via vertical shock loads in Gyms, and machinery types such as power presses etc
- **Vibration reduction:** through floors & walls via Refrigeration units and compressors etc
- **Dampening:** Internal structures & panels

- Excellent dampening and isolation characteristics
- Quick and easy to cut, trim & lay
- Adhesive bonding reduces the need for mechanical fixing

**WALL application:** RR20 is most commonly applied to brick/plastered walls that are virtually impervious; the suggested adhesive is a (double stick) Contact Adhesive applied to both surfaces. Due to the wide range of RR20 uses, the fixing method will vary depending on the application.

**Note:** Where adhesive bonding is required the walls or floors must be dry, flat & prepared to enable the adhesive to bond correctly.

Domestic Dwellings | Offices | Hotels | Conference Centres | Leisure Centres | Schools | Restaurants | Showrooms

# JCW RR20 Installation Guidance

## Floors

1. JCW RR20 can be loose laid onto a sub-floor to isolate and reduce vibration via a wide range of free standing items; gym equipment, washing machines, portable generators etc. Some items or equipment with high point loadings will require a board or ply pieces bonded on top of JCW RR20 to spread the load and prevent piecing or embedding into the JCW RR20 surface.
2. JCW RR20 could be loose laid onto a sub-floor to act as a mass layer and isolator and then overlaid with a floating T&G floor layer with bonded joints on top.
3. Bonding: for best results JCW RR20 should not be mechanically fixed to the floor surface, the best option is to adhesive bond. The type of adhesive and floor preparation has to be selected based on the floor surface that JCW RR20 is to be bonded onto. You will likely require a specialist contractor to access and prepare the floor.

## Walls

JCW RR20 is typically used as a mass isolator that is sandwiched between an internal flat solid plastered wall and 2 x 12.5mm plasterboard layers. The most effective improvement will be gained by adhesive bonding the JCW RR20 to the wall then (avoid using mechanical fixings) individually bonding 2 x layers of 12.5mm plasterboard layers onto the JCW RR20. The JCW RR20 can be butted up to the surrounding surfaces but the plasterboard layers must be isolated from the surrounding floor, wall & ceiling surfaces using JCW Isolation Strips. Adhesive bonding is most suitable on dry newly plastered surfaces or existing clean flat walls that are free of paint etc. Ensure that all of the products supplied for this work are dry and stored correctly before commencing. The plasterboards & JCW RR20 must be stored flat. If the work is being conducted below room temperature, this will affect the drying time of the adhesive and must be allowed for. Avoid fitting in damp conditions.

Remove skirting boards and ensure that the wall to be treated is flat and the wall plaster is solidly fixed to the wall. If some plaster is missing or feels hollow when tapped then this should be chipped off, replaced and allowed to thoroughly dry before any further work commences. Avoid electrical sockets in the wall; any existing holes i.e. via removed electrical fittings to be filled with sand & cement.

## JCW RR20 Bonding

Bond the JCW RR20 onto the wall using a quality Contact Adhesive (double stick). Install one panel at a time by applying the Contact adhesive with a trowel and spread the adhesive onto the entire JCW RR20 surface. Then apply the Contact Adhesive to the corresponding wall area in the same way and bond the panel to the wall. Continue in this manner across the entire wall surface. Take care positioning the panels correctly as contact adhesive is an instant grab/bond adhesive.

## Plasterboard Isolation

Isolating the plasterboard from ALL surrounding surfaces is essential to achieve the optimum acoustic improvement. By placing JCW Perimeter Edging Strip 25mm(w)x 5mm(d)x10Lm(L) on the floor surface the plasterboards vertical load can be supported across the floor surface. Alternatively 2-5mm thin spacers can be used at floor level (and surrounding surfaces) to achieve isolation, the spacers must be removed afterwards and the gaps fully filled with JCW Acoustic Sealant.

## Plasterboard Bonding

Place JCW Isolation Strips 25mm(w) x 5mm(d) x 10Lm rolls onto the floor surface and wall edge, position the plasterboard on the JCW Isolation Strips and mark the JCW RR20 area that is to be bonded. Then as above apply the adhesive using a spreader onto the plasterboard first then the JCW RR20 surface. Take care in positioning the panel correctly first time. When the first layer of plasterboard has been fixed the second layer can be bonded (in the opposite direction) covering the joints in the same manner but use the off cut from the first layer to start the second layer and be sure to maintain the same gap around the edges.

## Notes

1. Cutting JCW RR20; Use a Jigsaw.
2. Skirting boards are best bonded to the new wall at least 2mm above the floor surface.
3. If timber suspended floors and ceilings are between the new wall, sound can sometimes flank around an insulated wall through and into these areas. If this is a problem the joists next to the separating wall may require filling with a dense 45 or 60Kg.m<sup>3</sup> wool.
4. Small Fittings can be attached to the wall using purpose made plasterboard fixings such as Self-drive plasterboard fixings.

**Disclaimer:** The product and installation information contained in this Data Sheet and General Installation Guide is to the best of our knowledge correct. Please contact us direct, prior to starting works, for the latest information to enable confirmation of the specification.