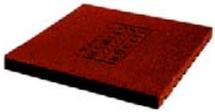


**PRODUCT INFORMATION
RUBBER TILES**



1. FEATURES

The tiles are made up of rubber granules bonded by a polyurethane elastomer resin which is solution dyed. It is normal for a material of this type to expand with the heat and contract with the cold.

Our tiles also feature other specially-prepared chemical components in their composition to add toughness and elasticity.

2. COLOURS

Red – Green

Make sure the tiles stored are not partially exposed to UVA rays as these will affect their colour. If the colour of tiles is uneven, it may be necessary to wait several weeks for it to become uniform. Discolouration may occur without affecting the features of the tile. The colour green is more sensitive to UVA rays than red.

3. MEASUREMENTS

500x500mm and 1000x500mm tiles – tolerance + 0.5% at 20°

Standard thicknesses: 20 – 40mm

Other measurements: 30 - 50 – 60 – 80mm

Tolerance +3% at 20°.

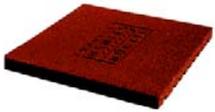
Microporous tiles featuring an integrated drainage system underneath the tiles so that water can escape.

4. USE

Public gardens, old people's homes, playgrounds, centres for the disabled.

The thickness of the tiles depends on the foreseeable height from which it is possible to fall from the play equipment.

The free fall height is calculated on the basis of the highest point in the playground in ordinary foreseeable use. The impact surface is specified in every datasheet for play equipment from BENITO URBAN, S.L.U.



5. MAINTENANCE

According to European regulations, a maintenance plan must be drawn up to check their condition. This inspection must be carried out at least once a year, depending on the level of use of the play area and the weather conditions, including cleaning, HCL measurement and check on the condition of the impact absorbing surface covering. If necessary, any damaged tiles must be replaced.

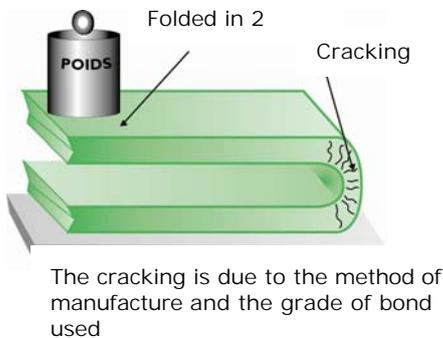
The design of BENITO URBAN, S.L.U. tiles means maintenance is cheap and simple. They can be washed or swept without any problem.

BENITO URBAN tiles are flexible, silent, non-slip and come in attractive colours.

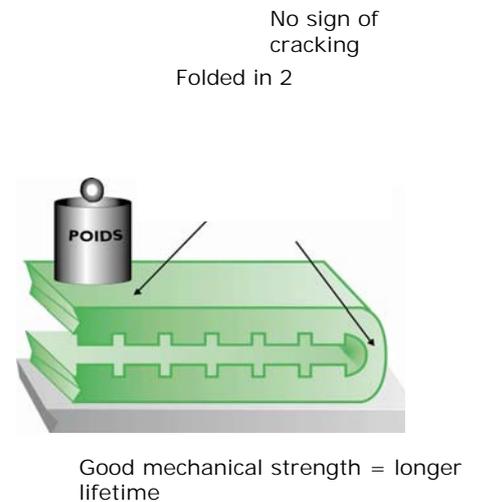
6. ADVANTAGES

They absorb impacts and so improve safety by minimising the risks of injury: they are non-slip, interchangeable and microporous.

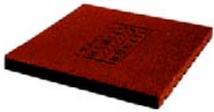
Water is allowed to escape thanks to an integrated drainage system underneath the tiles. Rounded angles on edges.



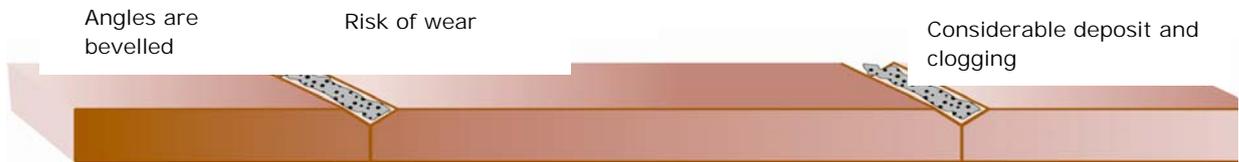
“X” IMPACT ABSORBING TILE



BENITO IMPACT ABSORBING TILE



“X” IMPACT ABSORBING TILES



No system of drainage for water to circulate – **ATTENTION IN CASE OF FREEZING!**

BENITO IMPACT ABSORBING TILES

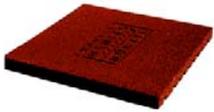


Drainage system to allow water to escape quickly.
No raising or cracking in the event of freezing – increased flexibility.

BENITO tile approved under UNE EN 1177 standard

7. STORAGE

Storage temperature between 15 and 25°
Avoid partial exposure of tiles to UVA rays.
Before laying, remove from packaging and place the tiles on a flat surface so that they can recover their shape.



8. TECHNICAL FEATURES

Tests conducted by an authorised laboratory. 11 launches of 4 impacts were carried out to determine the HIC. The critical fall height equals the worst result of these 11 launches.

THICKNESS	MEASUREMENTS	HIC
(Tolerance +/- 3% at 20°)	(Tolerance +/-0,5% at 20°)	(20° +/- 5°C)
*20mm	500X500	0m70
30mm	500X500	1m20
*40mm	500X500	1m40
50mm	500X500	1m50
60mm	1000X500	1m80
80mm	1000X500	2m

- | | |
|-------------------------------|---|
| - Rubber | Recycled SBR type 1/4mm black granules |
| - Bond | Solution dyed polyurethane type - - - |
| - Viscosity of bond | Brookfield: 7000+/-1000 –mPas at 20°C |
| - Surface | Non-slip |
| - Appearance | Granulated |
| - Colour | Red, Green (others: enquire) |
| - Thicknesses | 10-20-30-40-50-60-70-80mm |
| - Density in kg/m3 | 800-1000 |
| - Impact attenuation standard | UNE EN 1177 |
| - Abrasion resistance | According to P90102 standard
Result in weight loss: 0.37g
Maximum allowed: 2g |
| - Resistance to ageing | Depends on use.
(Lifetime between 5 and 10 years) |
| - UVA resistance | Good |
| - Detergent resistance | Excellent |
| - Permeability | Good - Microporous |

9. PACKING

On 1000x1000mm pallets (not returnable after delivery)

Packed in shrink-wrap film

Packed according to requirements

Thickness 20mm

max. 80m² on one pallet

Thickness 40mm

max. 40m² on one pallet



10. INSTALLATION

Before glueing the tiles in place, unpack them on a flat surface so that they can regain their features (decompression of the tiles).

10.1. GROUND

The tiles to be stuck down must be laid on stable, even, solid ground (concrete or bitumen) which is flat and dry.

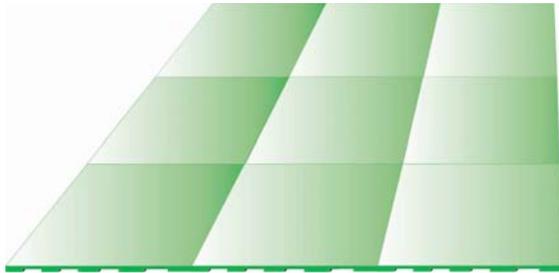
New pads must be left to harden for at least 28 days and be free from dirt of all kinds (slurry, dust, oil, grease, etc).

10.2. BOND

Use our single-part solvent-free polyurethane adhesive only.

10.3. OPTIONS FOR LAYING

OPTION A



OPTION B



Red tiles can be used for most of the surface and a few green ones added to give a touch of colour.

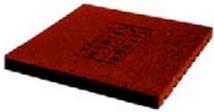
For option A we recommend leaving a gap every 3 or 4 tiles to stop the joints from getting out of step by the end of a row. The gaps can be filled in when installation is complete.

10.4. ATMOSPHERIC CONDITIONS

- Tiles cannot be laid in the rain, or when there is too much humidity; the atmosphere must be dry.

- Moreover, it is not advisable to lay tiles in periods of particularly high (+35°C) or low (-0°C) temperatures.

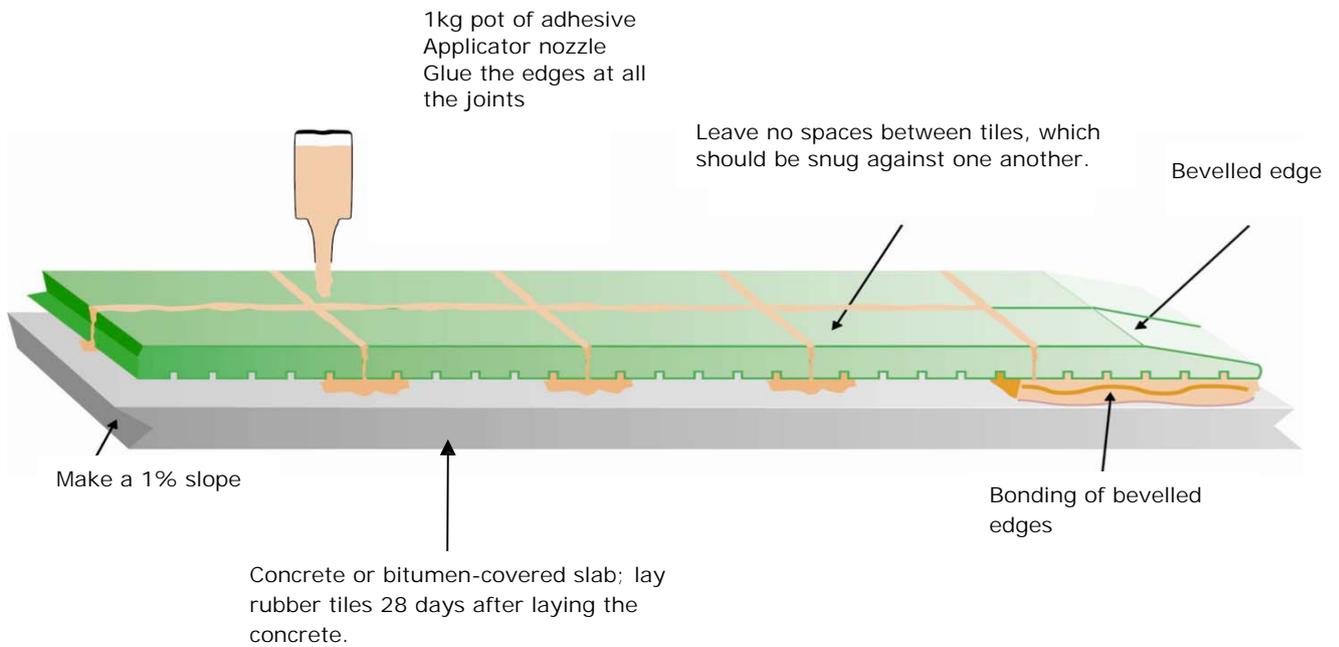
INSTALLATION DETAILS –BENITO TILES

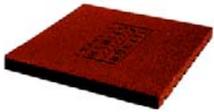


10.5. PREPARING THE GROUND

Clean the concrete floor or pad with a blower or vacuum system.
Check the surface of the pad, and if necessary polish it and leave it to dry for 24h.
The pad should be polished using a diamond (or stone) disc if there are any lumps.

10.6. LAYING BENITO TILES





10.7. CUTTING

Recommended cutting tools:

- Cutting knife (be sure to change the blades often).
- Electric vertical cutting saw.
- Wood saw.

10.8. GAUGING LAYING TIME

For a space of 70m²:

Polishing the concrete pad = about 1 day

Laying the tiles on surfaces without obstructions (such as street lights) which mean tiles have to be cut = 1 day (2 people)

Laying the tiles on surfaces where tiles have to be cut = 1 day (3 people)

Drying time (delay before opening the playground) = 1 day.

10.9. TOOLS REQUIRED

Vertical cutting saw with mixed cutting blades or teeth

Carpenter's line for marking out

Notched spatula

90° angle

Measuring tape

2m screed bar

1m long angle for cutting using the knife

Sander

BENITO.com

PRESENTES EN TODO EL MUNDO
PRESENTS DANS LE MONDE ENTIER
PRESENT WORLDWIDE



USA



France



Germany



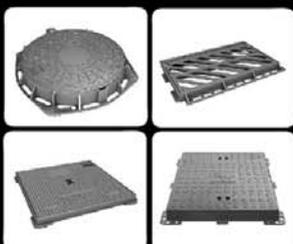
United Arab Emirates

Tapas y Rejas de Fundición
Fonte de Voirie
Manhole Covers and Grates

Mobiliario Urbano
Mobilier Urbain
Site Furnishing

Parques Infantiles - Equipamiento Deportivo
Aires de Jeux - Equipements Sportifs
Playground Equipment - Sports Equipment

Alumbrado Público Eficiente
Éclairage Public Efficient
Efficient Public Lighting



Italy



Spain



Turkey



Polynesia



Chile



Romania



Mexico



Morocco

BENITO URBAN

SPAIN: +34 93 852 1000 / +34 91 643 6964
FRANCE: +33 (0) 4 68 21 09 92
PORTUGAL: +35 1 308 802 832
ITALY: +39 0289 877 711
ROMANIA: +40 318 110 991
POLAND: +48 22 397 15 08

CHINA: +86 10 63705530
ARGENTINA: +54 11 5984 4113
CHILE: +56 2 938 2035
MEXICO: +52 (55) 4631 9722
BRAZIL: +55 11 3957 0340
PERU: +51 1707 1369