

30mm medium-textured Duracolor Beige SMA 10 FD surf  
Mex C bitumen macadam wearing course 6mm nominal size  
aggregate to BS 594987 or equivalent, for build-up refer to  
detail S1 6297-920

100mm C15 Concrete Haunching

Pre-cast concrete edging Kerbstone Tobermore,  
160mm long x 100mm wide x 190mm deep  
manufactured to BS EN 1338:2003, colour Natural or equivalent, installed  
to BS 7533-6:1999, laid flush with adjacent surfaces,

50 mm deep recycled shredded rubber surfacing bound with polyurethane binder  
Jungle Mulch or equivalent to BS 1177 and BS 7188. Colour Brown/ Earth tone.

Screed 75mm of no fines permeable concrete over blinding layer over 805 sub-base.  
Concrete to IS EN 206:2013 and TII Specification for Road Works 2600

200mm laid in layers and well compacted Type C clause 805 granular material  
Sub-base to TII and engineer specifications, to comply with IS EN 13285.

Geotextile separation membrane 0.75mm thickness, to EN ISO 10319,  
jointing 300mm overlap, Terram 1000 or or equivalent.

PS1

# Jungle Mulch Safety Surface Depth 50mm

1:10

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Project <b>Mallow Castle, Spa House and Town Park</b>		Project No. <b>6615</b>	
Drg. <b>Jungle Mulch Safety Surface Depth 50mm</b>		Drawing No. <b>995</b>	Rev. <b>00</b>
Scales <b>1:10 @ A3</b>	Status <b>INFORMATION</b>	Date <b>25/10/2019</b>	
Penrose Wharf Business Centre, Penrose Wharf, Cork Tel: +353(0) 21 242 5620		mail@bradyshipmanmartin.com www.bradyshipmanmartin.com	Drn. <b>LM</b>
		Chd. <b>DBos</b>	Passed





Pre-cast concrete edging Kerbstone Tobermore, 160mm long x 100mm wide x 190mm deep manufactured to BS EN 1338:2003, colour Natural or equivalent, installed to BS 7533-6:1999, laid flush with adjacent surfaces



30mm medium-textured Duracolour Beige SMA 10 FD surf Mex C bitumen macadam wearing course 6mm nominal size aggregate to BS 594987 or equivalent, for build-up refer to detail S1 6297-920



50 mm deep recycled shredded rubber surfacing bound with polyurethane binder Jungle Mulch or equivalent to BS 1177 and BS 7188. Colour Brown/ Earth tone.

50 mm deep recycled shredded rubber surfacing bound with polyurethane binder Jungle Mulch or equivalent to BS EN 1176, BS EN 1177 and BS 7188. Colour Brown/ Earth tone. (Depth required for fall height up to 1.3 m)

Base layer 110mm coarse rubber to BS 1177 and BS 7188. Thickness according to free fall height of play equipment as per European Standards. Refer to surface plan for extent of increased depth of impact absorption surface.

Screed 75mm of no fines permeable concrete over blinding layer over 805 sub-base. Concrete to IS EN 206:2013 and TII Specification for Road Works 2600

Screed 75mm of no fines permeable concrete over 805 sub-base. Concrete to IS EN 206:2013 and TII Specification for Road Works 2600

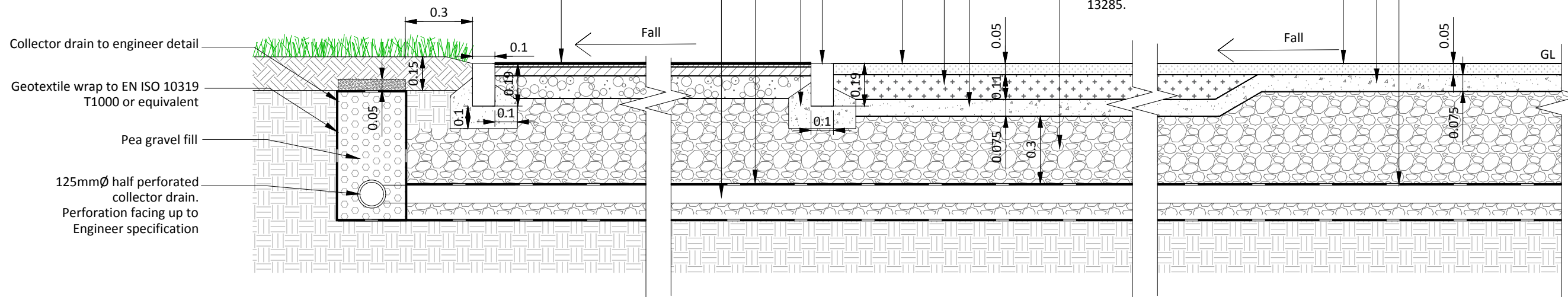
100mm C15 Concrete Haunching

Geotextile separation membrane 0.75mm thickness, to EN ISO 10319, jointing 300mm overlap, Terram 1000 or equivalent

300mm laid in layers and well compacted Type C clause 805 granular material Sub-base to TII and engineer specifications, to comply with IS EN 13285.

Geotextile separation membrane 0.75mm thickness, to EN ISO 10319, jointing 300m overlap. Terram 1000 or equivalent

Drain 80mmØ



PS2

# Jungle Mulch Safety Surface Depth 160mm

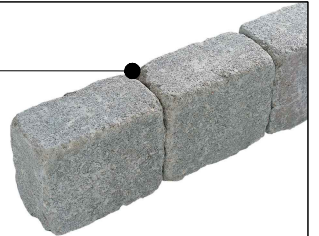
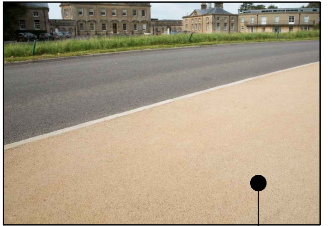
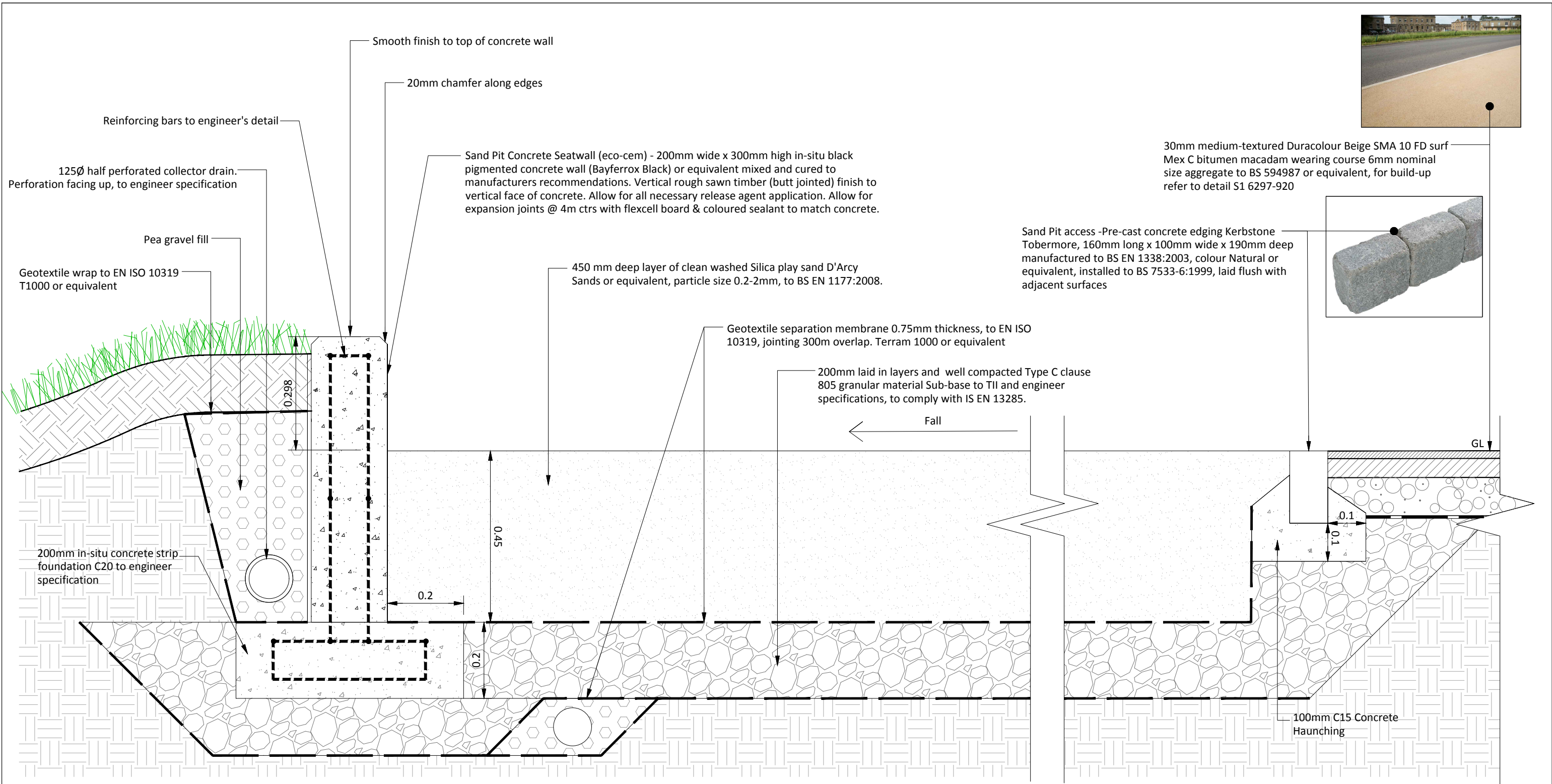
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Project <b>Mallow Castle, Spa House and Town Park</b>		Project No. <b>6615</b>	
Drg. <b>Jungle Mulch Safety Surface Depth 160mm</b>		Drawing No. <b>996</b>	Rev. <b>00</b>
Scales <b>1:20 @ A3</b>		Date <b>25/10/2019</b>	
Status <b>INFORMATION</b>		Drn. <b>LM</b>	Chd. <b>DBos</b>
Penrose Wharf Business Centre, Penrose Wharf, Cork Tel: +353(0) 21 242 5620		Passed	



Reinforcing bars to engineer's detail

125Ø half perforated collector drain.  
Perforation facing up, to engineer specification

Pea gravel fill

Geotextile wrap to EN ISO 10319  
T1000 or equivalent

200mm in-situ concrete strip  
foundation C20 to engineer  
specification

Smooth finish to top of concrete wall

20mm chamfer along edges

Sand Pit Concrete Seatwall (eco-cem) - 200mm wide x 300mm high in-situ black pigmented concrete wall (Bayferrox Black) or equivalent mixed and cured to manufacturers recommendations. Vertical rough sawn timber (butt jointed) finish to vertical face of concrete. Allow for all necessary release agent application. Allow for expansion joints @ 4m ctrs with flexcell board & coloured sealant to match concrete.

450 mm deep layer of clean washed Silica play sand D'Arcy Sands or equivalent, particle size 0.2-2mm, to BS EN 1177:2008.

Geotextile separation membrane 0.75mm thickness, to EN ISO 10319, jointing 300m overlap. Terram 1000 or equivalent

200mm laid in layers and well compacted Type C clause 805 granular material Sub-base to TII and engineer specifications, to comply with IS EN 13285.

30mm medium-textured Duracolour Beige SMA 10 FD surf Mex C bitumen macadam wearing course 6mm nominal size aggregate to BS 594987 or equivalent, for build-up refer to detail S1 6297-920

Sand Pit access -Pre-cast concrete edging Kerbstone Tobermore, 160mm long x 100mm wide x 190mm deep manufactured to BS EN 1338:2003, colour Natural or equivalent, installed to BS 7533-6:1999, laid flush with adjacent surfaces

100mm C15 Concrete Haunching

# Sand Play Surface and Concrete Wall

PS3

1:10

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Drg. <b>Sand Play Surface and Concrete Wall</b>		Drawing No. <b>997</b>	Rev. <b>00</b>
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Penrose Wharf Business Centre, Penrose Wharf, Cork Tel: +353(0) 21 242 5620		Drn. <b>AK</b>	Chd. <b>DBos</b>
mail@bradyshipmanmartin.com www.bradyshipmanmartin.com		Passed	

# Safety Rubber Mat Play area safety



Permanent impact absorbing, slip resistant permeable matting for play areas, fitness/ fun trails and pathways.

TERRAM SAFETY RUBBER MAT's are environmentally friendly, slip resistant and impact absorbing. They are ideal for children's play areas: around most multi-function play frames, springers, swings, fitness/fun trails and pathways. The rubber mats are placed onto existing grass areas and secured to the ground. The grass sward grows through the mat's apertures.

### Benefits

- Tested by RAPRA to BS EN 1177:1998 3m Critical Fall Height (CFH)
- Used on flat or contoured grass surfaces
- Unobtrusive once the sward has grown
- Wheelchair and pushchair accessible
- Absorbs shock and noise
- Excellent durability
- Slip resistant
- Resist wind uplift once secured correctly
- Apertures allow for drainage to leave the surface dry
- Requires no special skills or tools to install
- No costly base works unlike conventional tiles or wet-pour, rubber surfacing

Check the suitability of this product prior to installation as the CFH value will be affected by soil type, moisture and grass cover.

### Safety rubber mat product details

ROLL SIZE (m)	WEIGHT	THICKNESS (mm)	COLOUR	MATERIAL
1 x 1.5	12kg	62.5kg	Black	Recycled Rubber



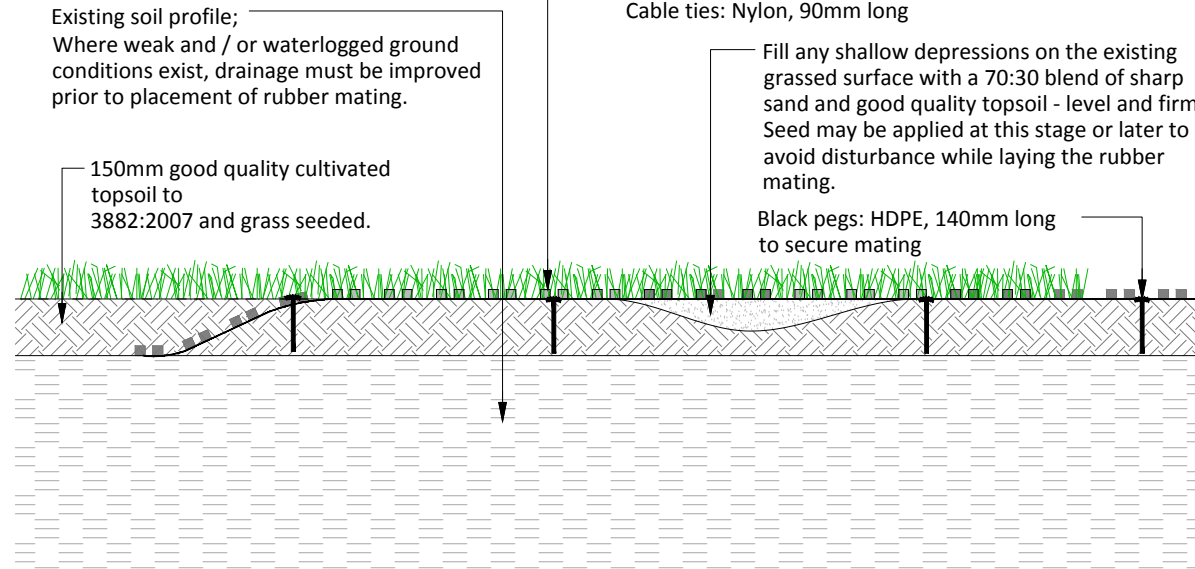
If the area is prone to being wet and soft then it is best to first stabilise the area with TURFPROTECTA Standard mesh. Otherwise the Safety Rubber Mats are placed directly over the area and secured using plastic pegs with the mat edges coupled together using cable ties (suitable pegs and ties are available to purchase). See the full Specification, Design and Installation Guidance Note which can be downloaded from [www.terram.com](http://www.terram.com).

PRODUCT	CABLE TIES	BLACK PEGS
MATERIAL	Nylon	HDPE
SIZE (mm)	90 long	140 long
OUTER	100 pack	100 pack

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**Supplier:**  
Fibreweb Geosynthetics Ltd,  
Blackwater Trading Estate, The Causeway,  
Maldon, Essex, CM9 4GG, UK  
Tel. 0044 1621 874200  
[www.terram.com](http://www.terram.com) or equivalent.

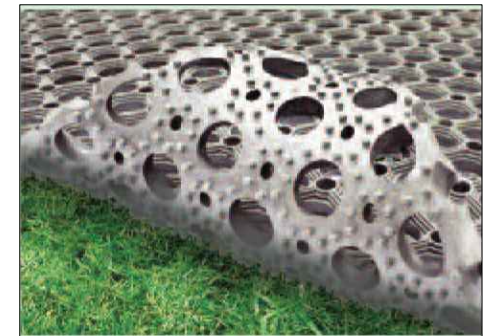
Terram Safety Rubber Mats, tested to RAPRA to BS EN 1177:1998 3m Critical fall height  
Roll size: 1 x 1.5m  
Thickness: 62.5kg  
Colour: Black  
Materials: Recycled rubber  
Cable ties: Nylon, 90mm long



## SECTION

### INSTALLATION GUIDELINES:

1. Measure and mark out the site where Safety Rubber Mat will be installed, cut the grass short, remove all clippings & debris.
2. Level any uneven areas (if any) of the proposed site using a good quality sandy top soil. Firm the surface and seed or turf these remedial areas.
3. Optional Structural Mesh layer  
On sites where the grass surface is prone to being wet and soft, the placement of an additional layer of lightweight plastic mesh (Boddingtons TurfProtecta® Standard:550g/sqm - Part No. 009862) will provide additional structural support to the Safety Rubber Mat. This additional mesh layer must be installed using plastic pegs, ensuring that its perimeter edges are no less than 150mm in from the proposed perimeter edges of the Safety Rubber Mat.
4. Lay out the Safety Rubber Mat on the proposed site and cut the mats to fit around any play equipment or obstacles as required. Mats which require reducing to less than half their original size are less effective and should be avoided wherever possible.
5. Proceed across the area from one perimeter edge butting the mats firmly against each other and fastening all edges tightly together using the black cable ties (supplied).
6. A minimum of 4 cable ties per edge joint will be required (i.e. 12 Ties per mat). Trim off the ends of the fixed cable ties ensuring that the cut end of the ties are not creating a hazard by being exposed above the surface of the mat.
7. Whilst fixing the cable ties to the edges of the mats, the plastic fixing pins (supplied) can also be applied to each mat if required or specified. A minimum of 3 pegs per perimeter edge of each mat is recommended (i.e. 8 pegs per mat).
8. Using a spade or half-moon edging tool, cut a slit into the ground along the perimeter edge of the rubber mat and to a depth of approximately 75mm. Roll back the edge of the Safety Rubber Mat. Then, using a spade and starting approximately 150mm from the slit and working away from the rolled back mat, cut a wedge shaped slice of turf out of the surface in the direction of and finishing at the depth of the 75mm slit. Remove the turf (retain for re-use if required) leaving a wedge shaped exposed soil channel. Continue this operation around the perimeter of the rubber mats where edge blending is required. Roll the edge of the Safety Rubber Mat back down into the exposed wedge shaped channel. Pin the edge to the ground through the small holes in the mat with plastic pins supplied and at same rate as previously in Item 6. Then, either; refill the exposed ramped edge to its original ground level with topsoil, firm down and seed as normal; Or alternatively, only fill the rubber mat cells with top soil, then trim a layer of soil from the retained turf to give it an appropriate thickness (approx 50mm), then re-bed the turf over the filled rubber mat and firm it into place to provide a discreet edge.
9. The grass will grow through and cover the apertures, continue to maintain and mow the grass as usual.



Lay the rubber matting plus optional reinforcement grass mesh on to existing grass.



Connect matting together with cable ties.



Fix mats using our elastic pegs.



Allow the grass to grow through the mesh apertures.

TERRAM Data Sheets, Installation & Design Guidances and other resources in the download pack from [www.terram.com](http://www.terram.com)

## Safety Rubber Matting on Grass



1:20

PS4

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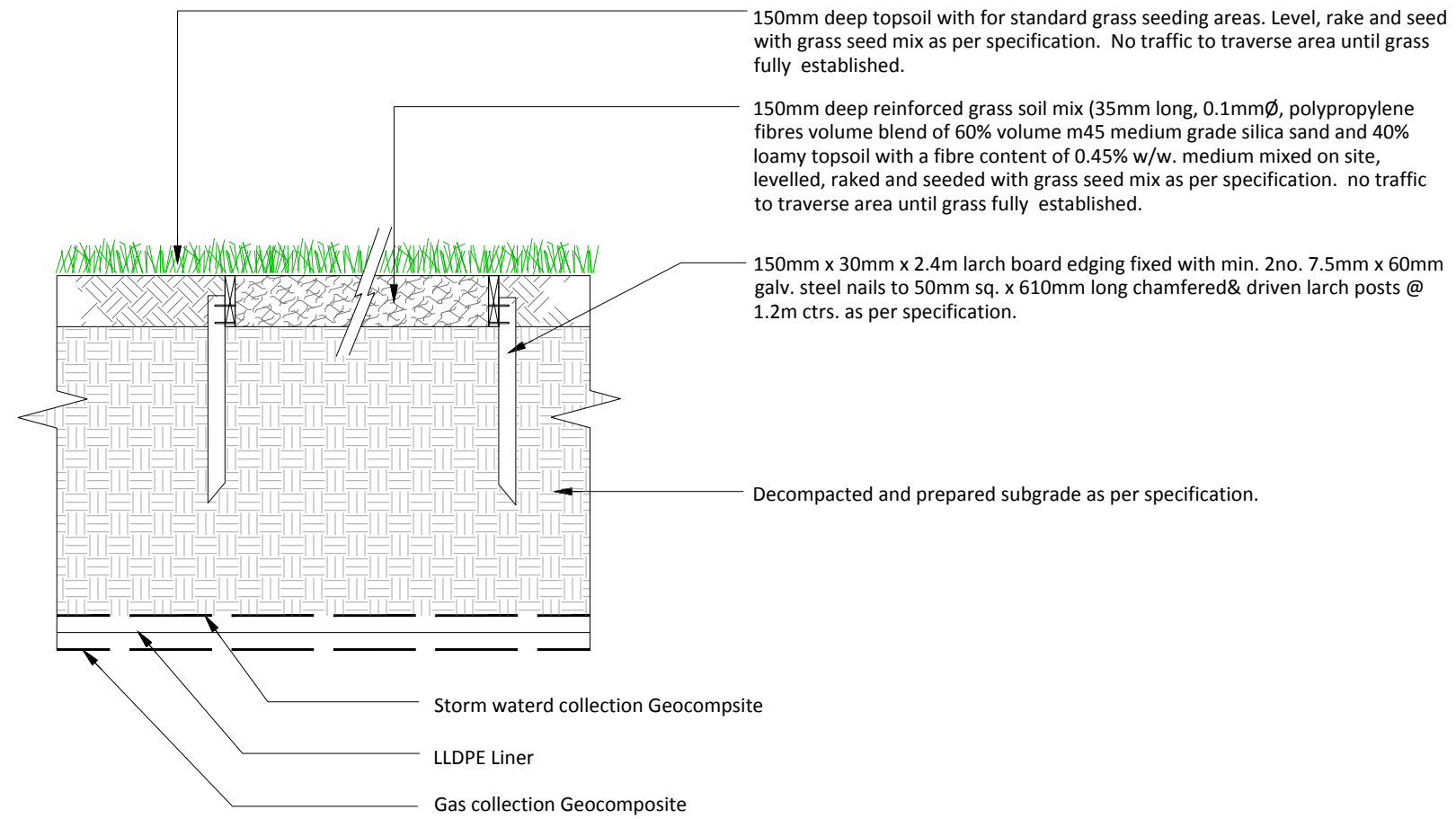
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		Passed	

**BSM**

Est. 1968



PS5

# Reinforced Grass with Edge

1:20

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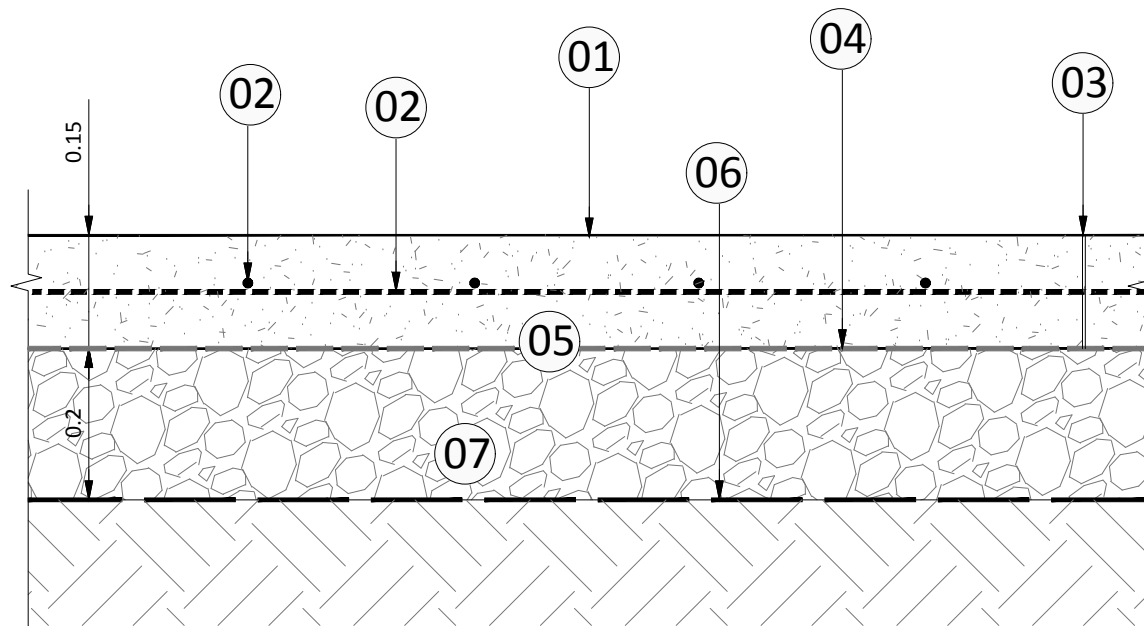
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Drg. <b>Reinforced Grass with Edge</b>		Drawing No. <b>999</b>	Rev. <b>00</b>
Scales <b>1:20 @ A3</b>	Status <b>INFORMATION</b>	Date <b>25/10/2019</b>	
Penrose Wharf Business Centre, Penrose Wharf, Cork Tel: +353(0) 21 242 5620		mail@bradyshipmanmartin.com www.bradyshipmanmartin.com	Drn. LM Chd. DBOs Passed

**BSM**

Est. 1968



**Key :**

1. 150mm deep reinforced concrete slab with steel float finish to engineer's specification
2. Rebar to engineer's specification
3. Jointing to engineer's specification
4. Visqueen plastic membrane, engineer's confirmation
5. 200mm laid in layers and well compacted type C clause 805 granular material sub-base to TII and engineer's specification, to comply with IS EN 13285
6. Geotextile separation membrane 0.75mm thickness, to EN ISO 10319, jointing 300mm overlap. Terram 1000 or equivalent
7. Fully compacted sub grade to engineer's specification.

PS6

# Concrete Slab to Skate Park

1:10

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Drg. <b>Concrete Slab to Skate Park</b>		Drawing No. <b>1000</b>	Rev. <b>00</b>
Scales <b>1:10 @ A3</b>	Status <b>INFORMATION</b>	Date <b>25/10/2019</b>	
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**BSM**

Est. 1968