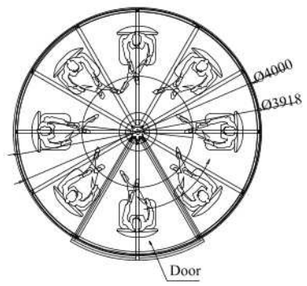
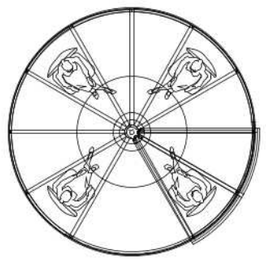


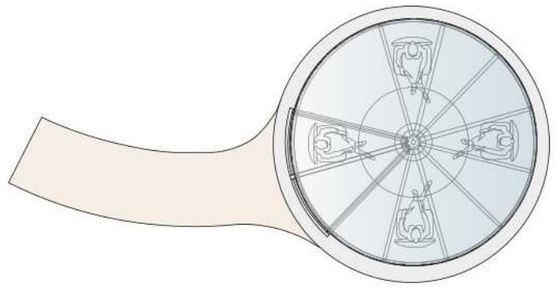
FRONT VIEW

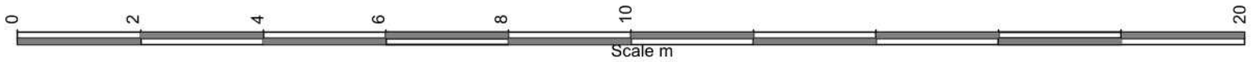


CLOSED POSITION



OPEN POSITION





DOLOMITIC LIMESTONE
75mm free draining self binding surface (12mm to fines) finish on 150mm rolled and consolidated crushed limestone MOT Type 1 to Clause 803 on a weed suppressant membrane

Note ;
The 75mm top layer will result in a fully compacted 50mm surface finish

NOTES
Do NOT scale from this drawing or any other prepared by JDA in connection with this project
This drawing is copyright and may not be altered, traced, copied, photographed or used for any purpose other than for which it has been issued without written permission of the copyright holder.
The Contractor is to check all dimensions on site and report any discrepencies PRIOR TO commencing work.
All details shown on this drawing are based upon typical site conditions related to the area. No resposibility can be accepted for abnormal conditions unless theyhave been reported in detail so that design amendments may be considered.
All works and materials are to be in full accordance with current British Standards, Building Regulations, Agrement Certificates and Manufacturers printed instructions.
All Building Regulations inspections are to be carried out at the appropriate stages of work.



SELF BINDING GRAVEL

Levelling the gravel
The Gravel should be spread onto the prepared foundation using a flat board or the back of a rake. Do not use the prongs of a rake as this will segregate the material. Spread the material out to a depth of approximately 75mm in order to achieve a finished compacted thickness of 50mm.

Compaction
The surface must then be rolled using a roller of similar type to that used for compacting the foundation with the vibratory action of the roller switched on and the area should be continually rolled until fullest compaction is achieved. It is imperative that the gravel is laid to a cross fall or camber in order to shed surface water - it must NOT be laid flat. To give some indication, an adequate fall would be 1 in 55 for a pathway and a minimum of 1 in 40 for much wider walkways, courtyards and car parks etc. The same gradient should apply when installing the Type 1 sub-base.

Surface Appearance Check
Ensure that adequate drainage is installed in proportion to the surface area being laid. The distance before the first point of drainage should not exceed 4 metres and should be repeated on larger areas of coverage. If rainfall is not dispelled rapidly this can lead to an ingress of surface water which will prevent the hardening and binding process of the gravel.
Once a uniform appearance has been achieved the second stage can be undertaken. This is the water rolling of the gravel for which the vibratory action of the roller must be switched off.

Use of Water
By using a water roller, water is automatically sprayed onto the drum of the roller. The fundamental aim is to have a film of water covering the whole gravelsurface but in most instances the water tank on the roller may be insufficient for dispelling enough water onto the drum and additional water will be required, this is almost always the case in dry warm weather. If the gravel is sticking to the roller, this indicates that there is insufficient water being applied. To rectify this, it is advisable that a hose is directed onto the drum of the roller as the material is rolled, saturating the drum. There should be a flood of water pushing forward as the drum rolls the surface. Never direct a hose directly onto the gravel itself as this will wash out the necessary fines which are required for the material to bind.

Floating the Fines
The object of water rolling this material is to float sufficient fines to the top surface of the gravel to obtain a well-bonded finish.
It is imperative that sufficient water is added to the material during the water rolling process. Failure to float the fines to the gravelsurface will result in the re-softening of the material, leading to an unbound finish. Approximately five gallons of water for each tonne of laid material is required to adequately float the marl fines to the gravel surface, which will allow the product to bind and harden.

Perfecting the Surface
As a visual guide when sufficient water has been applied, the area should have a similar appearance of freshly laid concrete, giving a shiny, glassy finish over the whole surface. Once this has been achieved the binding process can begin.
If there are any lines or grooves in the gravel left by the weight of the roller, a soft wide broom can be used to gently pass over the surface whilst still wet – this will remove any lines and leave a uniform surface finish.

Time to Dry
It is important that the area should then be allowed to dry out fully before being opened up to general use. The length of time to allow is dependent on weather conditions, but this can take up to a period of two weeks or more. We would also advise during the drying process that the area is not used. Please note that materials should never be laid in frozen conditions.

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Client : Asprey Facilities Ltd

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Scale 1 to 100 at A3

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