

# Guidelines for the installation of Tobermore **Historic Flags**

#### Planning your patio

 Planning your patio before starting will make it quicker and easier to lay. Make a scale plan of your garden and draw various designs, taking into consideration, where will receive most sun and how you can minimise cutting. Mark out your final design using lengths of string to check that you are happy with the layout.

Note: At Tobermore we have in-house designers who will be able to advise you on your design.

#### Points to remember before starting

- Your patio must be at least 150mm below the damp-proof course (DPC) of your house so some excavation may be required. You will need somewhere to put this excavated material - so if you can't have it taken away perhaps you could construct a rockery elsewhere in the garden.
- If you want to incorporate outdoor lighting around your patio it is easier to run cables before starting.
- The finished level of your patio should be level with the adjoining lawn so that you create a mowing edge to avoid damaging your lawn mower blades.
- If your patio is being laid against the wall of your house, a fall must be incorporated to allow water to flow away. See details on drainage and falls.

#### Drainage and falls

 The flag surface requires a minimum crossfall of 1:70, to avoid water lying on the surface. If necessary, drainage gullies can be installed to catch the water where runoff is not possible.

#### Laying the flags

These are basic guidelines on how to install paving flags, please refer to the relevant British Standard for more information, details on reverse.

- 1. Sharp sand 20-40mm is screeded over the sub-base and compacted using a plate vibrator.
- 2. Begin laying the flags and ensure any uneven areas in the bedding layer are repaired using a hand trowel.
- 3. When laying the flags always ensure you allow a 2-3mm joint.
- 4. Use a level and hammer to ensure flags are laid evenly.

#### Jointing the flags

Joints should be filled with either:

- 1. Jointing Sand (Brush in jointing sand ensuring all joints are filled);
- 2. Rompox; or
- 3. Mortar (Extreme care must be taken as it will stain the surface).

#### Please note

Jointing sand, grit and Rompox are purchased separately to the flags and are available from Tobermore.

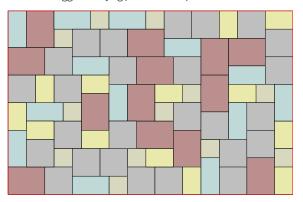
Flags may be cut with a guillotine or power saw to suit curved edges, manholes etc.

To achieve an even blend of colour when laying paving flags, it is desirable to mix product from three to four different pallets.

#### Laying patterns

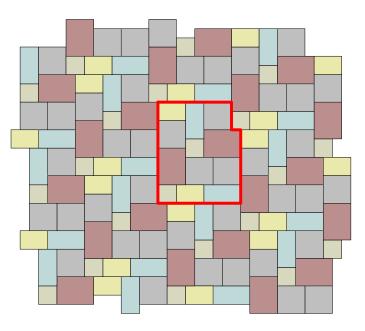
 These are the suggested laying patterns for 1 pack of Historic Flags. The area covered including the joints is 14.04m2.

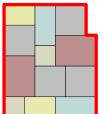
Pattern A: Suggested laying pattern for full pack



4650 x 3000mm

Pattern B: Suggested laying pattern when using more than one pack.





2 x 300x300mm - Green 2 x 300x450mm - Yellow 4 x 450x450mm - Grey 2 x 600x300mm - Blue 2 x 600x450mm - Pink

# Instructions & Warnings

# As referred to in Tobermore's Conditions of Sale

# CORE TERMS (PAVING & WALLING)

#### Product

All products should be carefully inspected for defects or damage upon delivery and prior to being laid or fitted.

#### **Product Information**

Within Tobermore, design and development of products is a continuing process, and product information is subject to change without notice. Accordingly, please check with Tobermore to ensure that the product information you have represents the most up-todate product information.

#### Prior to installation.

It is good practice to sort products to ensure consistency of colour, texture and dimensional tolerance.

# Installation

All products should be installed in accordance with the latest British Standard.

#### **Colour & Texture**

Tobermore produces paving and walling products with excellent density and durability. Products are manufactured using naturally occurring raw materials including aggregates, granite aggregates, pigments and sand. Although every effort is taken to ensure consistency, inevitably due to the presence of these naturally extracted raw materials variations in colour, shade and texture can occur. Therefore, colours and textures illustrated are representations and should not be expected to be an exact match.

Batch codes should be checked prior to installation to reduce the risk of product shading and ensure consistency of finish. When multiple packs are being installed in one area, please ensure you check that they are all from the same production batch. This can be done by checking the batch code label that is displayed on the packs. This is of particular importance when installing single colours such as Golden, Buff, Natural, Charcoal and Red. Tobermore therefore recommends that products are thoroughly mixed on site by drawing from a minimum of four pallets.

We would always recommend that when purchasing products, especially in larger quantities, that they are all ordered and manufactured in one batch to reduce the chances of colour / shade or texture variation

Please note that the colour of new products will inevitably vary compared to those which have been installed for a period of time as weathering does take place.

All colour illustrations in Tobermore's brochures are as accurate as the printing process will allow. For a more accurate colour match please refer to actual product samples, which can be provided.

#### Staining

Some chemicals that are commonly used in gardens such as lawn feed containing Ferrous Sulphate can stain concrete products. Any chemicals that are spilt must be removed immediately by rinsing away with clean water. Please check the information on the instruction label of the container holding the chemical.

#### Moisture

Occasionally, after installation some units may show variations in shade and have a patchy appearance. This is due to the varying amounts of moisture within the concrete and the ground. The drying out process of concrete continues in-situ after installation. Given time and natural weathering, the capillaries within the surface of the concrete will gradually close and any patches will tone in with the surrounding area. This will not affect long-term performance.

#### Efflorescence

Efflorescence is a white crystalline deposit that occurs naturally on the surface of concrete materials. Tobermore use market leading technology to significantly suppress the occurrence of efflorescence, however, if it occurs, it may mask the colour of the product for a period of time, but tends to be washed away gradually by rain. Tobermore do not replace products with efflorescence. Packs of products which have had packaging removed should always be re-covered with appropriate packaging to prevent the occurrence of secondary efflorescence.

#### Surface Scratches

Minor scuffs or bruises may occur during delivery, movement onsite, and installation (for example, during any plate vibrating process). In Tobermore's experience, these marks usually weather off through time. (EasyClean products are protected with a glue dot)

To reduce the risk of surface scratches we strongly recommend the use of a vibrating plate with a rubber protective mat.

# Ordering

Please ensure that your contractor accurately measures the area on site before ordering products. In Tobermore's experience, dimensions taken from a project plan can vary significantly from the final layout. Depending on the layout of the project, we recommend ordering an additional 2 - 5% of material to allow for cutting, detailing and wastage

#### Manufacturing & Quality Systems

Tobermore is a BS EN ISO 9001, BS EN ISO 14001 and BES 6001 registered company. Tobermore uses an integrated management system to manage all health & safety and environmental issues.

# Product Maintenance

Routine cleaning and maintenance is required to keep the overall appearance of products in pristine condition.

All concrete products can develop algae, lichen, and moss growths due to environmental conditions and may require cleaning. Areas adjacent to plant borders and trees may discolour from transfer of plant-life. Tobermore cannot accept responsibility for any of these conditions

#### Laying multi-blend coloured paving blocks, flags and walling products

To achieve an even blend of colour when laying multi-blend paving blocks, flags and walling products, it is desirable to mix from 3 or 4 different pallets

#### **Queries & Complaints**

Please contact one of Tobermore's Paving & Walling Centres or offices (contact details at www.tobermore.co.uk) with any queries or complaints. Any complaints must be notified to Tobermore without delay.

# CORE TERMS (PAVING ONLY)

# **Product Maintenance**

Light coloured paving blocks and flags emphasise tyre marks and oil spills on the driveway. Please note that these products will need more maintenance if overall appearance is to be maintained.

#### Initial Cleaning

When an area has just been paved, allow it to settle for a few days. After this, you may wish to lightly hose down the paving to remove any excess sand or dirt. The area should then be treated with a weed killer suppressant two - three times per year as required.

## **General Cleaning**

Paving requires regular maintenance, including regular sweeping to prevent the build up of detritus. Tobermore recommends that paving is cleaned two - three times per year.

For general cleaning of dirt and algae, vigorous brushing with a stiff yard brush with plenty of hot detergent solution (washing up liquid or non-bio washing powder), thoroughly rinsed with clean water, should suffice. Repeated treatment may be required for paved areas sited beneath trees or in permanent/near permanent shade.

A light power hose at medium pressure is generally all that is required to clean general dirt and grime. Any jointing material which is removed must be replaced. Do not use high pressure powerwashers as aggressive power-washing can damage the product surface. A trial area should be tested before large scale powerwashing takes place. (Important: EasyClean products should not be pressure washed. Please refer to specific EasyClean information)

#### Moss, Lichen and Algae

Thick growths of moss or lichen must be removed first by scraping out the joints and then treating the area with a moss killer such as anti-moss paving cleaner. Anti-moss is designed to remove moss, lichens and algae. It is best applied in dry weather. After being applied it will take a few days to be fully effective. Once the moss and lichens have been killed, they can easily be brushed off. Anti-moss also leaves a residue in the sand joint which will help reduce the likelihood of regrowth. The manufacturer's instructions should always be followed when using any cleaning agent.

# Weeds

Large weeds should be removed by hand and then the area treated with a weed killer (available from any good garden centre). Smaller weeds can then be treated directly with weed killer and these weeds should start to die within days. The manufacturer's instructions should always be followed when using any weed killing agent.

#### **Block Paving Sealer**

It is possible to seal block paving with a resin material which combats staining and weed growth and which also enhances colour and appearance. The acrylic sealer is sprayed onto the block paving and forms a 'skin' on top of the paving and the jointing material giving an easily maintained finish. The manufacturer's instructions should always be followed when using any sealing agent. (Important: Do not use sealers on EasyClean products)