

Royal Grass

installation advisory



Royal Grass is a turn-key system, world wide installed by specialized landscaping companies with the Royal Grass philosophy in mind "Only with perfect installation you will enjoy your Royal Grass lawn most." This advisory is ment for professional use only.



ROYAL GRASS®

Introduction

This advisory provides useful information for installation of Royal Grass products. This advisory describes procedures in general terms. Should situations occur requiring a higher degree of expertise, you are encouraged to contact Landscape Solutions or other Royal Grass installers and seek their experiences. Please notice, installation of artificial turf is always workmanship. An installer must be trained and have practised on the basic skills before installing a lawn independently.

Systems: sandfilled or full grass

Artificial turf for landscaping purposes can be recognized at long grass fibers (length: 25 mm - 40 mm). Long tufted artificial grass requires support to stay upright. This support can be given by sand, called sand filled systems, or by a curled artificial fiber at the rootzone, called full grass systems. The choice is dependent on intensity of use, place of installation and preference of the customer. In common sandfilled systems have a more natural appearance, ofcourse when combined with the natural looking fibers like the V-shape. Royal Grass infill sand has more benefits then you would think at first sight: it gives better support to keep the fibers to stay upright, it serves as ballast to keep Royal Grass in place, the fill sand acts as a fire retardant, sandfilled turf is more vandalism proof. The advantage of a full grass system is that it is easier to install.

The base

Royal Grass must be installed on a base that: is sufficiently stable; has sufficient bearing capacity; is perfectly level; has proper drainage. Ultimate responsibility for a proper installation of the base for Royal Grass lies with the installer. Base components are comparable to those used for decorative pavement and terraces. Generally a layer of roadbase sand or breaker sand of 5 to 20 centimetres will suffice, depending on soil conditions. Once laid, the sand pack must be levelled and compacted; Royal Grass delivers the best results on a perfectly level base. On a loam or clay base we recommend an extra layer of crushed rock with roadbase on top for enhanced water drainage and stability. Such ground always presents a risk of subsequent subsidence. Note: A sand bed is imperative to achieve stability and proper water drainage. Never install artificial turf directly on black soil!

Royal Grass is excellently suited for installation on hard surfaces such as concrete (balconies), bitumen (roofs), etc. It is imperative that the hard surface has proper drainage and is level. When you suspect the base will not provide sufficient drainage, you should engage a specialist company for this.

Sandfilled Royal Grass Exclusive



Full grass system Royal Grass Delite



Size and weight Royal Grass

Royal Grass artificial grass comes in rolls of 4 metres wide, approximately 20 or 25 metres long and with a diameter of about 60 centimetres, i.e. one roll of Royal Grass covers 80 till 100 m². Weight of one roll of Royal Grass is about 250 - 300 kilos.

Deliveries of Royal Grass sand infill are made on pallets with 25 kilograms bags. The brown Royal Grass sand infill comes in paper bags. Therefore, the sand must be stored in a dry location.

Storage Royal Grass

Royal Grass is wrapped around a cardboard tube which facilitates the transport by forklift truck with carpet pin attachment.

Place the roll on a shelf in a warehouse rack or hang it on a sturdy bar in a carpet rack. Hanging in a carpet rack facilitates unrolling the artificial grass and cutting it to the required length. When you use a warehouse rack, you can unroll the artificial grass hanging from the forklift truck carpet pin attachment.

Always use a warehouse rack, do not stack the rolls! In a stack the pressure will render the bottom rolls oval shaped. This may result in creases in the grass.

Responsibility for creasing resulting from inexpert and/or careless storage will at all times be the dealers.

Delivery records

Keep accurate delivery records and note roll numbers on the rack holding the rolls of artificial grass. If you receive a new delivery of Royal Grass and you want to combine the grass coming off old and new rolls then first verify that all rolls are from the same production batch. If not, there is a risk of minor colour discrepancies.

When taking delivery, always check the quantity and especially verify the roll numbers as provided to you on the order confirmation. In the unlikely event that the transport company made delivery of an incorrect roll please notify us immediately in order to either update our roll number administration or have the roll replaced.

Tip: Also note for each roll the quantity of artificial grass you cut off this particular roll for projects. This way you know the remaining quantity on the roll without having to unroll it before using it on the next project.

Transporting the artificial grass to site

Roll up the required metres of artificial grass that you cut off in the warehouse. Make sure there are no folds. Use the used cardboard tubes on which the artificial grass is supplied; so do not throw them out!

Make sure that after loading it onto the truck, the roll does not stick out and sag. If this proves to be impossible, make sure you unload the roll immediately upon arrival at the site and store it in horizontal position.

Rolls can be moved from the truck to the worksite manually or by using a carpet trolley. For large areas where 100 m² rolls are used and motorized equipment is not an option, stick 2 sturdy bars into both sides of the cardboard roll tube. This creates a firm grip for moving the roll by hand or by carpet trolley.

Curbing

The most perfect result is obtained by installing curbing, with the base 3 cm below curb edge. This way the artificial grass is securely enclosed, while still showing properly over the curbing. Curbing can be made of all kinds of materials (stone, concrete, plastic, hardwood, metal, etc.). Also when grass is installed on balconies, curbing is required to achieve the effect of clean lines. Curbing also serves to prevent that fill sand washes out.

Installation plan

To avoid unnecessary joints (glued joints) it is advisable to design a plan showing the number of roll meters required for the specified area, before you cut and unroll the Royal Grass product at the site. As explained above, when Royal Grass is unrolled the fibers are initially levelled in one (pile) direction. It is imperative when installing Royal Grass on areas broader than 4 metres (i.e. laying several rolls in parallel) that pile directions are the same. It is advisable to lay pile direction so that it points to the customer's favourite vantage point; generally the (main) terrace.



The photo clearly shows that from roll 2 (standard 4 metres wide) a 2.25 metre strip has been cut along the entire width. This strip can be used elsewhere during other installation and should not automatically be discarded as waste. In this example, the quantity of Royal Grass to be delivered comes to number of metres per roll multiplied by roll width. Please allow for waste when advising the customer on a delivery, and always take measurements to avoid coming up short.

Tip: Clearly state, when quoting the customer, the gross volume of artificial grass to be used. The customer tends to calculate on the basis of net area, potentially resulting in confusion concerning the price quoted.

1 - Install geo textile (optional)

Installing a pressure equalizing fabric (geo textile) under the artificial grass (on top of the sand bed or crushed rock base) brings several benefits. It equalizes the pressure during installation thus reducing the risk of damaging the levelled base. It also protects the carpet backing to get damage from the crushed rocks over time. With a fabric on top the artificial grass slides more smoothly across the base material. Plus, it provides a clean surface on which to create joints (sand free artificial grass) and the grass cutter moves more easily across the underlying surface. It also prevents against weat and roots.

2 - Unrolling and cutting

Unroll Royal Grass across the base. (avoid as best you can a sliding with the artificial grass when unrolling, to prevent uneven spots in the levelled sand bed.) Make sure that all strips of artificial grass are placed in the same pile direction and allow for an overlap of about 10 cm to make the joints. Allow for a small overlap along the perimeter (about 10 cm) to make sure that the artificial grass shows properly over the curbing. Cut the sides to size exactly following the contours of the curbing. Depending on curbing type and type of contours (e.g. curves), there are a number of methods. Artificial grass may be cut best from the back.



3 - Creating joints

To create a centre seam, first make a clean cut along the sides of the artificial grass mat. Sides are made of black backing fabric sticking out generally about 5 to 10 cm on both sides. Make a clean cut along the sides between the first and second rows of grass fibers, using a sharp Stanley tool. Now you can cut at the back, because the fiber row provides a clear guideline.



Make sure the 2 halves are placed as close together as possible. There cannot be any overlap! This must be done very precisely, because you want to create a fitted seam. Special seam cutters are available; please enquire at your supplier.



Butt seams, glued joints across the width of the roll, generally remain more visible and must be avoided as much as possible. Allow for this when designing the laying plan. Butt seams cannot be avoided altogether. Make sure the artificial grass is cut off as straight as possible. Always cut at the back, otherwise you will damage the artificial grass fiber. When cutting, use a metal or aluminium strip. Without using such an aid, it is very hard to cut a straight seam.

Its challenging to completely hide joints. It is imperative to give the end user proper information, to avoid disappointment later.

4a- Connecting joints (option 1)

Where two pieces of turf come together you will need to make a seam. The seams can be simply connected with Royal Grass QuickSeaming tape. Before adhering both pieces ensure that both edges have been properly trimmed, straight, and will match up perfectly.

Fold both sides away and unroll the QuickSeam tape. Cut the tape on the same length as the carpet. Remove the thin sheet of the tape. Now fold and close the artificial grass and press down on the seams; repeat this several times. After a few hours the seam is cured properly.



Make sure when folding the joint closed, that no fibers are caught! They remain clearly visible. To prevent this it is also an option to fold and close the artificial grass first, then remove the sheet of the tape.

4b- Connecting joints (option 2)

Where two pieces of turf come together you will need to make a seam. The seams can be connected with seam tape and glue. There are two types of glue available. A two-component glue which need to be mixed before glueing and an one-component glue which is ready for use. Both types have some advantages and/or disadvantages. For more information please contact your supplier or Landscape Solutions.

Artificial turf glue is a Polyurethane glue. Do not use PU glue directly on a wet base and only in dry weather conditions. For working temperature and other information, please follow up the instructions on the packaging.

Fold both sides away and unroll the Royal Grass joint tape with the rough side up. (If you use a two-component glue, mix the glue using a power spiral mixer until you have a swirl-free, homogenous mass.) Distribute the glue evenly over the joint tape using a glue spatula. (Take great care when applying the glue; do not spill on the artificial grass because it is difficult to remove it). Now fold and close the artificial grass and press down on the joints; repeat this after 45 minutes. Always check that a sufficient quantity of glue has been applied. When you lift up the mat, its underside must be fully covered in glue.

For sandfilled systems

Start immediately with pouring the sand fill. During work breaks, be sure to weigh down the joints with sand bags. It takes several hours for the glue to cure properly.

For full grass systems

Be sure to weigh down the joints with sand bags. It takes several hours for the glue to cure properly. For full grass systems we advise to use the Royal Grass QuickSeam Tape.

Applying glue by means of the glue tray

Another option, besides manual gluing, is the glue tray which is perfect for quickly and accurately creating glue tapes. By using a glue tray you ensure that the glue is distributed in an even coat across the joint tape. This saves on glue consumption as compared to applying the glue manually, plus it works a lot faster.



5 - Applying sand fill

Before starting to apply the sand fill, make sure the fibers of Royal Grass are upright; this will make the sand sink to the bottom more easily. During warmer weather the fibers will already be upright after giving the grass some time to relax in the sun. Both grass and sand must be dry in order to get the sand properly distributed. Wet sand or wet grass hamper the fill work, because wet sand sticks to the tops of the grass fibers. Fill work is best done using a special sand or fertilizer drop spreader.



There are 2 selected sand types i.e. yellow round sand and brown coated quartz sand. Please consult the specification for the kilos of sand needed, this varies per product. The bottom of Royal Grass gets a layer of dried yellow sand which is supplemented with a top layer of brown coated quartz sand. The fill sand plays a key role and must satisfy specific quality standards. To qualify for warranty, it is imperative you apply sand supplied by Royal Grass or sand sourced as per Royal Grass specification.



Procedure

- Apply a first thin layer of white sand using the sand spreader. Make sure that the routes of the trolley overlap, otherwise you will get tracks.
- Rake the sand into the grass using a rake with curved tines. Rake against pile direction.



- Apply the next thin layer of white sand.
- Rake the sand into the grass using a rake with curved tines. Rake against pile direction.
- Complete the sides by filling and brushing in white sand manually, because the sand spreader does not fully reach into sides and corners.
- Use the sand spreader to apply a first thin layer of brown sand, make sure the routes of the trolley overlap.
- Apply a second thin layer of brown sand.
- Complete the sides by filling and brushing in brown sand manually.
- Use a stiff broom to brush the grass and clean any remaining materials like loose grass fibers. Do not use a rake or mechanical brushing machine for the brown sand, otherwise you mix white sand in with brown sand.

Installation errors

Repairing installation errors is a difficult and precise job. In some occasions, it is even impossible. The most common mistake is not precisely cutting the grass at the borders and joints, making them visible to the eye. When the grass is cut short or not in a correct manner at the edges, this is impossible to repair. The only solutions would be to re-install a new piece of Royal Grass. This implies that a new seam will have to be made. Make sure that you work very precise on such reparation as a visible seam is more disturbing than a wrongly cut edge.

Finishing tips

Royal Grass can basically be laid unsecured onto the base. Sandfilled products will stay in place by the weight of the sand. So, there is no need to secure the sides of this grass in the earth, unless at hard-wearing locations such as centre shoulders or roundabouts. Use the supplied glue to fix the artificial grass to concrete where needed.

Full grass systems can be laid unsecured also but we strongly advise to secure the sides at high foot traffic areas or in combination with critical circumstances like wind (roof terraces).

As Royal Grass retains its colour in winter and summer, it is recommended to install the grass beside evergreen plants (like yew and box trees) or beside pavement. Royal Grass can be cut any shape with a sharp blade, so you can make Royal Grass fit perfectly against decorative pavement.

Royal Grass can be laid directly beside black soil, but this requires close continuous maintenance. Always avoid black soil getting into the artificial grass by installing partition curbing of, for example, stone, wood, plastic or stainless steel.

Completion by Royal Grass

At completion of an installation on site at end-user, make sure that:

- *Installation is complete, including all side-finishing work.*
- *Some pieces of grass remain behind at the customer, to avoid any colour variations in case of repairs later on.*
- *Some dark brown sand remains behind for later fill work, as appropriate.*
- *All packaging materials and other discarded materials have been removed.*
- *All spilled sand has been removed from surrounding areas, so that the total work site is clean at completion.*
- *The customer has received (verbal) information on how to maintain the Royal Grass product.*
- *The completion document has been completed for the installers and Landscape Solutions records.*
- *The customer has received (digital) the warranty and maintenance booklet.*



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