

# **Comfort Slat Mat**

## **Installation Instructions**



# Manual Assembly of The Green Floor System c/w Mk III Valve

## Before you begin:

- Read this manual carefully
- Check instructions on receiving delivery (see chapter 1)
- Ensure slats are clean, uniform, flat, and free from burrs (see chapter 2)
- Provide adequate labour

## Tools Required:

- For installation of The Green Floor:
  - Work-gloves and Kneepads
  - Manual installation tool – for ease of fitting (Optional)
- To Cut The Green Floor:
  - Jig-Saw & Box Cutters
  - Drill & Drill Bit (3mm)
  - Specialized Sealant – available from your agent
- For installation of the Mk III valves
  - Wire Cutters
  - Box Cutters
  - Work Bench

## Table of Contents

1. Managing your Green Floor System Delivery .....	4
Packing docket .....	4
“Inners” and “Outers”.....	5
Valves.....	5
2. Sample listing of quantity & type of valves for Den Boer Beton gang slats (140mm) .....	6
3. Preparation – Cleaning & de-burring of the concrete slats .....	7
4. Installing “The Green Floor” only (no valves) on the concrete slats .....	8
Preparation.....	8
Way of fitting the floor .....	8
Maximum notch length for either end of The Green Floor.....	8
Sequence to fitting “The Green Floor System” .....	9
Mat Fitting Tool .....	9
5. Fitting of Valves Mk III on to “The Green Floor”. .....	10
6. Installing “The Green Floor” c/w Valves Mk III on to the gang slats .....	11
7. Installing “The Green Floor” around impediments / permanent fixtures. ....	12
8. Tips.....	13
9. Instructions from the manufacturer - Irish Custom Extruders Ltd. ....	14

# 1. Managing your Green Floor System Delivery

## Packing docket

The Green Floor System is delivered on pallets. Each pallet has its own packing docket (example) with information on the quantity and type of Green Floor. Please ensure that you check what is on the pallet against the packing docket. If there are any discrepancies, please notify your agent immediately. Keep the packing docket until all The Green Floor have been removed and checked. Note: each label has its own unique reference number. Once you have checked your delivery you can remove packing film and strapping.



Pallet of Green Floor Mats packed, strapped & labelled ready for dispatch – side photo



Pallet of Green Floor Mats packed, strapped & labelled ready for dispatch – end photo.  
Note: Disposable White support cubes to facilitate safe transport of The Green Floor.

## AGRO IMPORT

**Pallet number: 1**

**(143 H) 68 x 2475 mm (inners)  
(143 H) 34 x 2475 mm (outers)  
(143 H) 70 x 2200 mm (inners)**

**Example of pallet packing: Customer name, pallet number, quantity, length & type of mat.**

If you have ordered differing Green Floor mats, we recommend you open one pallet at a time and place them near where they are to be fitted.

## “Inners” and “Outers”

There are two different mats – “inners” & “outers”. The inner mats are to be placed on the internal (inner) ribs of a gang slat and are identified by having notches on both sides of the legs of the mat (See figure 1). The outside mats are placed on the external (outer) ribs of the gang slat and are identified by having one leg with no notches (See figure 2).

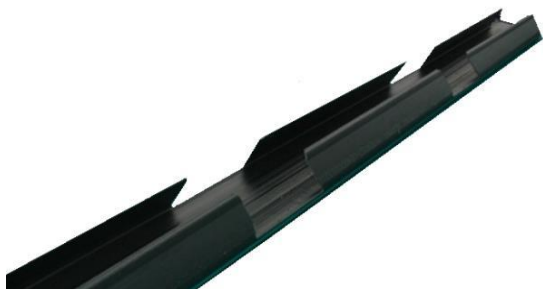
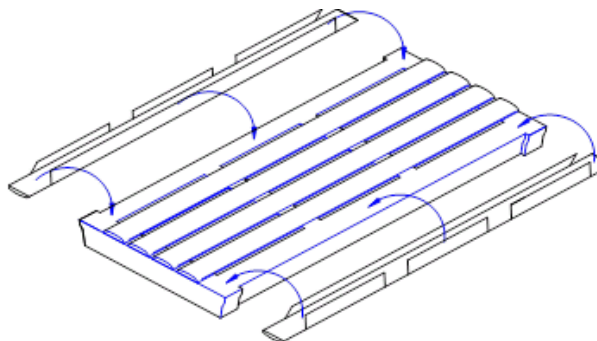
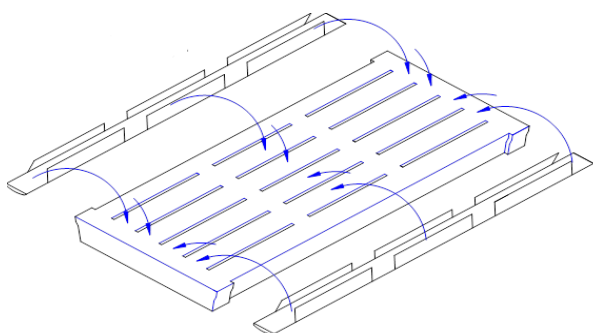


Figure1- “Inner” mats



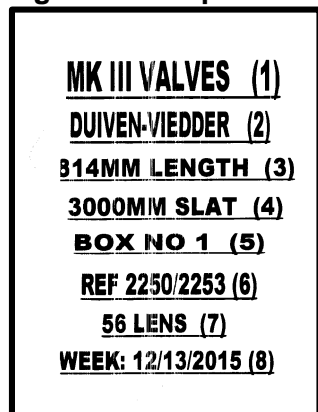
Figure 2 – “Outer” mats



## Valves

Mk III Valves – (Optional) are supplied in a separate boxes. Each box has a sticker (See figure 3) with information as to which Slat length the Green Floor mat valve is to be fitted to, the length of the valve, customer name, product reference number and quantity in the valves in each box.

Figure 3: Sample Label for Mk III Valves



### Contents of Label Information (in order)

- Line 1 – Product description
- Line 2 – Customer Name
- Line 3 – Length of valve
- Line 4 – Overall Slat length
- Line 5 – Box/Carton number
- Line 6 – product code
- Line 7 – Quantity
- Line 8 – Date of Production

## 2. Sample listing of quantity & type of valves for Agro Import gang slats (140mm)

Agro Import 140mm gang slats Green Floor Valve Quantity & Type								
Slat Len	Drawing No	Inner Slats only	Valve Qty. Per Gang	Valve Length (mm)	Valve Qty. Per Gang	Valve Length (mm)	Filler Valve Qty. Per Gang	Filler Valve Len MM
1600	10823N	X	12	614			1	135
1625	13008N	X	12	614			1	135
1675	13032N	X	12	614			1	135
1970	11011N	X	12	789			1	135
2000	109016N	X	12	789			1	135
2170	11012N	✓	12	889				
2200	109017N	✓	12	889				
2300	10850N	X	18	614			1	270
2400	10822N	X	18	614			1	270
2470	11013N	X	18	614			1	270
2500	109018N	X	18	614			1	270
2700	11019N	✓	18	731				
2720	11014N	✓	18	731				
2750	109019N	✓	18	731				
2970	11015N	X	18	814			1	270
3000	10816N	X	18	814			1	270
3250	12027N	✓	24	639				
3500	10843N	X	24	701			1	405
3750	109021N	X	12	509	18	634	1	540
4000	10844N	X	30	634			1	540

### 3. Preparation – Cleaning & de-burring of the concrete slats

It is important that the slats are clean, free from debris and have no sharp edges. Any sharp edges can damage The Green Floor and reduce the lifespan. Any debris will prevent The Green Floor from sitting correctly on the slats.

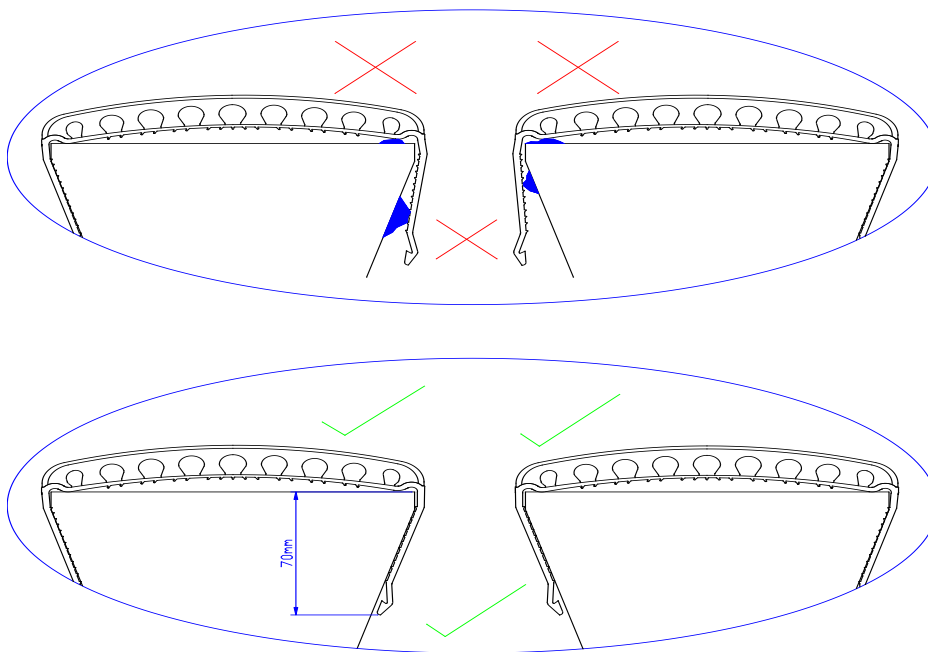
Firstly remove any large debris from the slats and then brush the slats clean of any

smaller debris. Then examine the edge of the slats and ensure there are no sharp edges. If there are sharp edges they need to be removed by means of a file, large metal pole or grinder. When all sharp edges have been removed please brush the slats to remove any further debris or dust created during this process.

#### **NOTE: Preparation for fitting The Green Floor to existing Gang Slats**

It is important the slats are clean of all residues. The top of the slat can be cleaned by means of a power washer. The sides of the slats must be cleaned below the surface by 70mm (figure 4). This can be achieved by a combination of a power washer to loosen the residue and a spade to remove the residue. If this residue is not removed, it may lift the mat and/or prevent the “leg” of the mat from following the tapered contours of the slat, which may restrict the natural removal of faeces from the floor.

**Figure 4 – Ensure ALL residues are removed**



## 4. Installing “The Green Floor” only (no valves) on the concrete slats

### Preparation

Bring the Green Floor System as close as possible to relevant slats. This ensures speed of installation. Ensure the mat is correct for identified slat and is facing the correct way. Often the mats are not reversible.

### Way of fitting the floor

The most efficient and easiest method of installation is with two people. The first person lifts and presents the mats to the slat while the second person fixes the mat to the slat.

Fitting is achieved by opening the two legs (black) and placing the mats over the slat rib. Next, place pressure by means of your foot or knee (See - photo 5 & 6 – pages) on the green surface of the mat, Repeat this process along the length of the mat until the mat is fully fixed. For further information and video of fitting instructions, we have uploaded a video on our Comfort Slat Mat YouTube channel and [www.slatmats.com](http://www.slatmats.com)

Link address is: <http://youtu.be/YojB-4UbnE>



Figure 5 – pressure applied by foot



Figure 6 – pressure applied by knee

### Maximum notch lengths for either end of The Green Floor

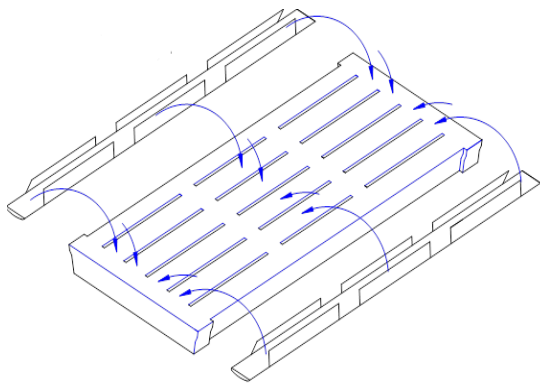
We recommend that the mat is notched no longer than 220mm for mats of 140mm and greater and 180mm for mats of 133mm and less (see figure 6 – red circle). If the Green floor is notched longer than 220mm, we recommend the Green Floor is fixed to the concrete to prevent The Green Floor from being dislodged. A stainless steel fixing screw is recommended (see tip G).



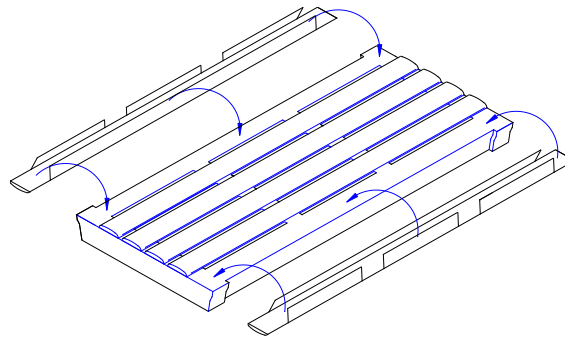
## Sequence to fitting “The Green Floor System”

For ease of installation it is advisable to fit the inner mats first. On most 6 gang slat there will be 4 “inners”. (See – figure 7). The “inner” mats will have “notches” or cut-outs along both legs to facilitate the cross beams.

**Figure 7– Fitting “Inners”**



**Figure 8 – Fitting “Outers”**



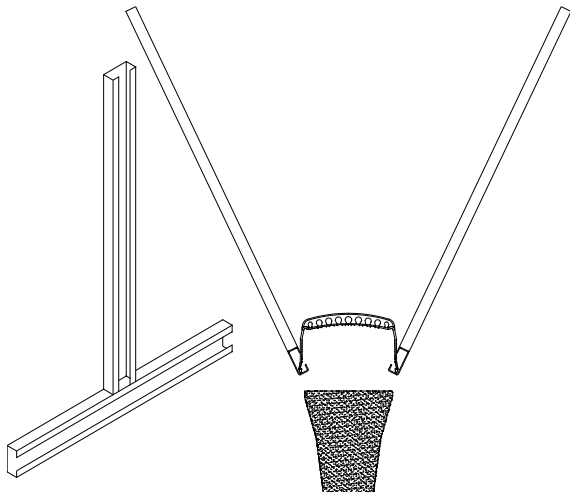
Once all the “inners” are fitted, proceed to fit the “outers”. On most 6 gang slat, there will be 2 “outers”. (See – figure 8). The “outers” can be identified by the fact that one of the legs will not have any “notches” or cut-outs along the leg to facilitate the cross beams. Please note there may be small cut-outs to facilitate the spacers on the slat. These are usually at either end of the gang slat, as per the drawing above.

**Note:** A small number of gang slats are classified as “all inners” i.e. on the 6 gang, they have 6 no. “inner” mats and no “outer” mats

## Mat Fitting Tool

A fitting tool (set) – (See – figure 9) is available for rent to aid with the speed and ease of installation. For further information, please contact your agent.

**Figure 9 – Mat Fitting Tool**



**NOTE:** For further information and video of fitting instructions, we have uploaded a video on our Comfort Slat Mat YouTube channel and [www.slatmats.com](http://www.slatmats.com)

See YouTube Channel link:  
<https://www.youtube.com/watch?v=qgorWuB1AU0>

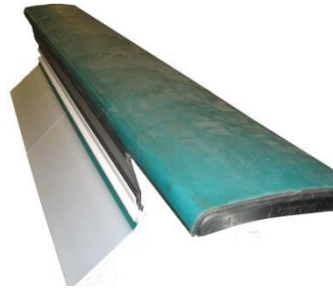
## 5. Fitting of Valves Mk III on to “The Green Floor”.

The valves are in labeled boxes. Identify the slot and the valves suitable for each Green Floor mats (i.e. the valve length must match the leg length. Sometimes there are two or more valves to complete a full slot length. You will be provided with a list of all valves and the type and number for each Green Floor mat.

Lay the first Green Floor mat on a bench upside down (green side down). Identify which end of the mat corresponds to the gang slat. The valves are only fitted to one side of the mat, so it is important that you choose the correct side for all mats. Slide the corresponding length valve(s) on to the mat (See – figure 10). The valve will only fit one way – i.e. with the spring facing towards the centre of the mat (See – figure 11 & figure 12).



**Figure 10 – sliding valve on to The Green Floor**

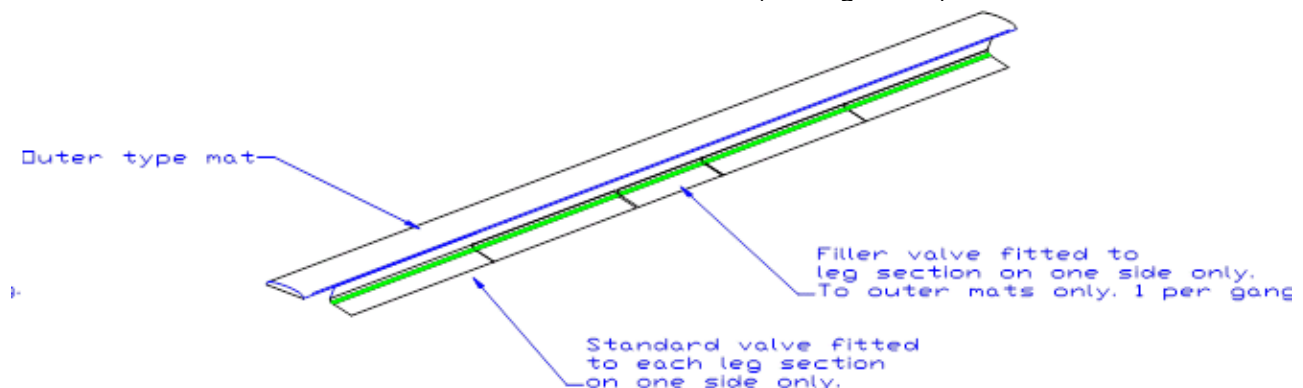


**Figure 11– The Green Floor fitted with valves.**

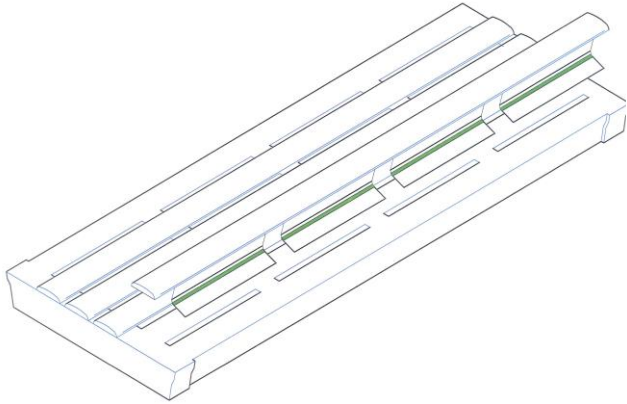
After you have fitted all the valves ensure that the valves move freely and return to their original position (See – figure 11).

**NOTE:** Slat manufacturers produce gang slats with “spacers” on the outside of the slats to create a slot when the slats are aligned. In most cases these do not correspond to the support beams on the gang slat. (See – figure 13 & 14 on the next page)

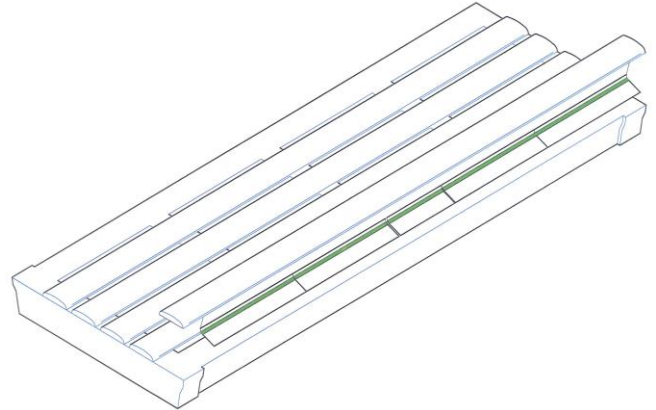
For ease of assembly, the quantity and size of the valves for the “outers” are the same as the valves for the “inners”. However, with the “outer” slot, we supply an extra “filler” valve to compensate for the gap created by difference in measurement between the support beams and the spacers. This is always the last valve to be fitted (See figure 12).



**Figure 12**  
**Mats fitted with valves for “outer” gang slats (c/w “filler” valve)**



**Figure 13**  
**“Inner” mat & valves presented to the gang**

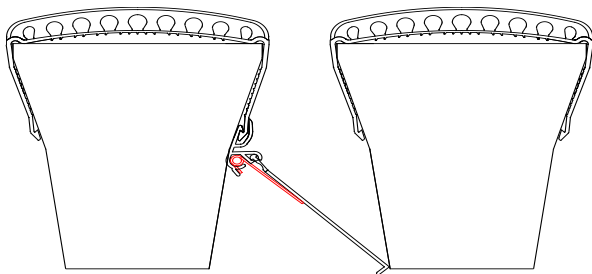


**Figure 14**  
**“Outer” mat & valves presented to gang slat**

## 6. Installing “The Green Floor” c/w Valves Mk III on to the gang slats

See video on [www.slatmats.com](http://www.slatmats.com) or Comfort Slat Mat You Tube channel

1. Place mats c/w fitted valves on gang slats
2. Align valves with slots and gently place valves into slots
3. Ensure springs do not get caught
4. Flip mat over - (Green side up)
5. Place wedge tools into slots (if required) Wedge tools are available to rent from your agent.
6. Grab the free leg of mat with fitting shovel. Fitting Shovels are available (to rent) from your agent.
7. Pull towards slot and lever into slot
8. Tap mat home gently ensuring firmly in place
9. It is important to use the same size fitting shovel to The Green Floor leg size/ Slot length.
10. While standing on the mat, gently remove wedge tools
11. Manually ensure valves are operating. (See – Figure 15).

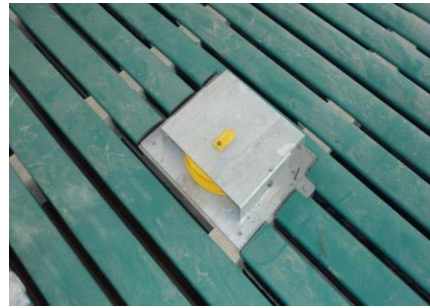


**Figure 15**  
**Side profile of mats & valves fitted to gang slats**

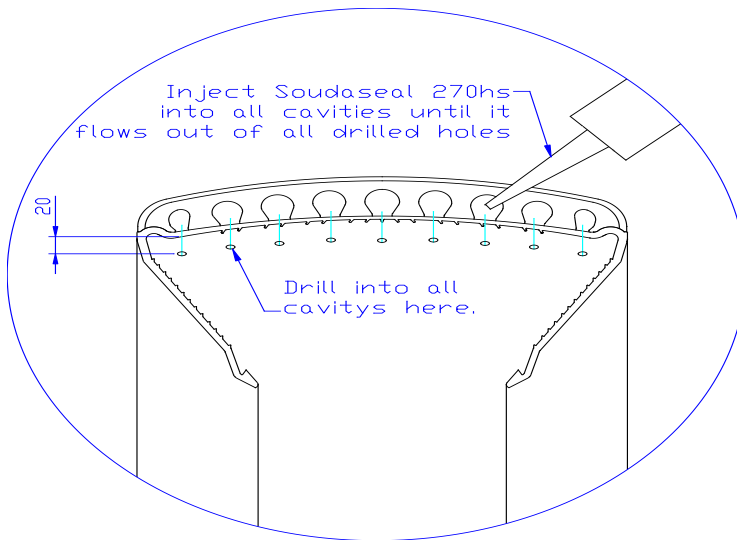
## 7. Installing “The Green Floor” around impediments / permanent fixtures.

Where there are unanticipated permanent fixtures such as posts, water troughs or barriers. It may be required to shorten the Green Floor. A jig-saw, Hack - saw or angle- grinder are suitable for this. Pay particular attention when measuring to ensure the newly cut mat is as close as possible to the structure (See – Figure 16).

Your agent can supply a special mastic kit (See – Figure 17) to seal any exposed areas of the mat. Your agent will provide fitting instruction with the mastic kit.



**Figure 16 –The Green Floor fitted around a permanent fixture.**



**Figure 17  
Mastic applied to Mats cut on site**

**Note:** Your agent has portable welding to reinstate the end caps if The Green Floor System is shortened on-site. The welding table can be used on-site or in the factory and can only be operated by authorized persons. For further information on availability, please contact your supplier.

## 8. Tips

- (A). Work carefully and always use work gloves and knee pads
- (B). In colder weather, The Green Floor System can be stiff and thus more difficult to install. In these situations, we advise you place The Green Floor System indoors 24 hours in advance of installation
- (C). Ensure you have adequate workmen and power before commencing installation.
- (D). Note: Care should be taken to identify which mats (inner & outer) are suitable for which slats. Do not unwrap pallet until you have confirmed quantities of mats & valves) and verified locations in the barn.
- (E). While inner mats will fit the outer part of the slat, outer valves will NOT fit the inner part of the slat. If the "inner" or "outer" mats are fitted to the wrong slats, they must be changed, which is time consuming.
- (F). A small number of gang slats are classified as "all inners" i.e. on the 6 gang, they have 6 "inner" mats and no "outer" mats
- (G). To screw fix the Green Floor in certain situations, please use stainless steel screw fixing. When fixing to slats or hardened concrete a Hilti HPS – 1R 8/30 x 40mm or similar is recommended. When fixing to a softer concrete a Hilti HPS – 1R 8/30 x 60mm or similar is recommended. Please ensure that any holes drilled are sealed with a recommended mastic.

## **9. Instructions from the manufacturer - Irish Custom Extruders Ltd.**

- The use of scraper systems is allowed in coordination with the manufacturer of the scraper.
- The scraping plate must be fitted with a polyurethane blade of the correct height and length which facilitates the blade to follow the contours of The Green Floor System.
- A scraper with a chain is NOT permitted. However, if you have a chain pulled scraper, we can design the The Green Floor to facilitate this. Speak with your agent about this.
- A rope or SWR is acceptable providing there is no contact with The Green Floor. (A small guide wheel can be placed below the level of the blade to prevent undue friction on The Green Floor.
- Vehicles (max. weight 1 ton) are permitted on The Green Floor with the following provisions:
  - Radial tyres with maximum 4 bar pressure
  - Diagonal tyres with maximum 3 bar pressure
  - Maximum speed 2km / hour
  - Do not brake abruptly.
  - Do not park on the Green Floor
  - Slope should not exceed 2%
  - Gentle acceleration and no turning
  - Ensure there are no sharp parts lodged on the tyres.
  - Ensure you have proper foot ware.
  - For the first few months the Green Floor will be harder than expected. The Green Floor will soften up to the apportioned softness for your barn. The lead time for this depends on stocking density. After this “bedding in” period, the floor will become less stiff and stabilize ensuring a confident grip for the animals.
- If valves are installed, ensure that the manure in the pit/tank is always below the level of the valves. This ensures the proper working of the valves.

The information provided is correct at the time of print. The manufacturer/seller has the right to change the specification and general conditions of sale.

