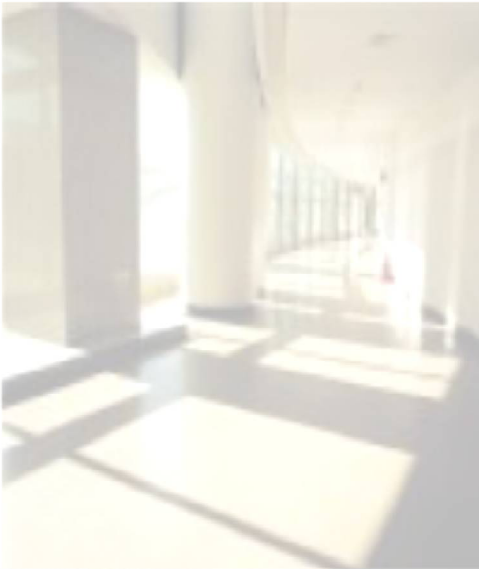




I-Badak Softrong Installation/Maintenance Manual





Installation

Prior to installation, please read the installation guidelines carefully for good quality.

I-Badak Ltd. will not be responsible for defects caused by failure to following instructions.

Before installation, there are few things it is needed to do first.

- Inspection of Rubber flooring
- Stabilization of rubber flooring
- Clean and leveling and Moisture testing of the subfloor
- Selection of proper adhesives

※I-Badak products are proper floor covering for indoor. Do not expose the rubber flooring to direct sunlight and moisture. It causes the discoloration and cracks and deterioration of the rubber flooring.

1. Product Check & Storage

1) Inspection

- ▶ Check the label of products for accuracy with orders.
- ▶ The following information is contained in the label of the products.
 - ① Type of product ② Color ③ Thickness, Size ④ Quantity

※ Identify the “Lot No.” to prevent the discoloration.

Check the a different color and the defect of rubber flooring surface before bonding.

It is only possible to solve the product defects before installation

2) Storage

- ▶ Do not stack more than two pallet. It may cause the deformation of the product.
And, don't carry the products by strapping as it may cause damage.
- ▶ Rubber flooring and adhesive should be maintained at a temperature (15~30℃) for at least 48 hours installation site for stabilization.

The installation is prohibited at the temperature of the below 15℃



2. Subfloors

Rubber flooring is typically adhered to the subfloor with a quality flooring adhesive for the extremely durable flooring.

Rubber flooring can be installed above a variety of subfloors. But, Not all rubber flooring products are approved for the wet area.

The condition of subfloor is very important. If condition of subfloors is very poor, it is recommended self-leveling for good quality.

- 1) Subfloor must be smooth, clean, level, flat, dry, no-cracks and clean without and dust, paint, wax, oil, grease, old adhesive material.

 - 2) New-concrete subfloor is recommend waiting until the slab is at least 90 days.
Prior to installation, it must thoroughly clean the slab and conduct the moisture test .
Moisture condition of concrete subfloor should be below 4.0% prior to the installation.
If the condition of subfloor is not suitable, installation must not proceed until the problem has been corrected.
More moisture than standard give rise to a serious trouble at the rubber flooring.

 - 3) Installation on the existing floor covering (wood, pvc , linolum flooring etc) may cause the shrink or swelling or problem of adhesive property..
It is recommended that remove the existing flooring completely. If it is difficult to remove the existing flooring, the surface of flooring must be thoroughly stripped away to remove the wax layer. And, remove any damaged or loose flooring prior to installation.

 - 4) Wood subfloors must be flat, clean, level, smooth and dry. Type of Chipboard, Particle board is not generally approved.
- ※ If it is find any problem on the subfloors and any question, please contact to I-Badak for correct installation recommendations



3. Choose an Adhesive

1) Always follow manufacturer's recommendations when choosing an adhesive.

Some adhesive products are made specially for certain types of rubber flooring.

2) Adhesives are applied across the subfloor with a trowel and the rubber flooring is laid into the adhesive bed. Some adhesives have "open times". This means after apply the adhesive to the flooring then wait the designated amount of time for the adhesive to set and become tacky.

It is important to follow all instructions for the flooring's long term stability and durability.

3) Prior to use, adhesives are thoroughly mixed with a drill and suitable mixing paddle. Do not mix by hand.

4) Only approved adhesives must be used for warranty to rubber flooring quality.

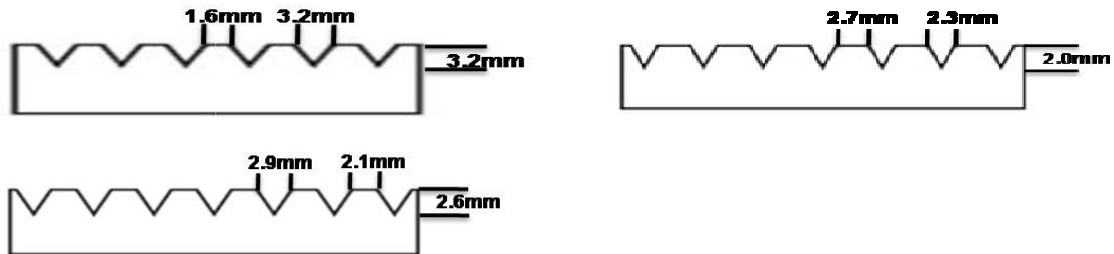
► Recommended Adhesives

	Adhesives			
	W-300S	HUG-04	R710	G12
Manufacturer	Hwasung	Hwasung	Henkel	Mapei
Main component	1-component Acrylic type	1-component Polyurethane type	2-component Polyurethane type	2-component Epoxy type
Colour	Beige paste	Grey paste	•Polymer(Paste) -Grey •Hardener(Liquid) -brown	•Polymer(Paste) -Light brown •Hardener(Liquid) -Dark brown
Mixing ratio	-	-	•Comp.A(4.5) •Comp.B(1)	•Comp.A(1) •Comp.B(1)
Standard consumption	0.25~0.35kg/m ²	0.4~0.5kg/m ²	0.3~0.8kg/m ²	0.5~1.0kg/m ²
Open Time	10~20 min	20~40 min	10 min	10~20 min
Working time	40~50 min	1 hours	45 min	1 hours
Time of full cure	Foot traffic (24 hour) Full Cure(3 days)	Foot traffic (24 hour) Full Cure(3 days)	Foot traffic (12~18 hour) Full Cure(7 days)	Foot traffic (12~24 hour) Full Cure(3 days)
Packing	10kg, 20kg	4kg, 20kg	4kg, 10kg	5kg, 10kg
Area of application	•Medium traffic area. •No use the site by the affected by humidity	•Heavy-duty commercial area •Epoxy and polyurethane are water-proof adhesives. But, excessive exposure of water in use is caused flooring deformation, weakening of adhesive strength		

※ The above information applies at normal ambient conditions. 20 °C, 55% humidity



► **Recommended the notched trowel**



※ Selection of trowel and Adhesive consumption varies according to the condition of the subfloor and floor covering.

5) Test for proper adhesives

This test ensures that adhesion strength between the adhesive, subfloor and rubber flooring. Allow the rubber flooring to cure for 48 hours then try removing the flooring. Rubber flooring should be difficult to remove as the adhesive should remain bonded to the subfloor and rubber floorings

6) Precaution

- For a proper application of the adhesives and the further information, please contact the adhesive manufacturer.
- The above using condition of adhesive is applied at normal environment. 20 °C, 55% Relative Humidity.
- Open and Working time will be vary depending upon temperature, air flow and humidity.



4. Installation of rubber floorings

- Set the rubber floorings and adhesives in the installation site where they will be installed 48 hours before installation
- Always, products should be visually inspected prior to installation.
- When installing the product, ensure there is sufficient ventilation to prevent inhaling adhesive fumes.

1) Installation

- ① Measure the room and draw the center line.
- ② Arrange the tiles without adhesive according to the arrow mark on the back.
- ③ Apply the adhesive with the right trowel according to the manufacturer's instructions.

Be sure of the open time and working time by the following manufacturer's recommendation.

- ④ Lay the rubber tiles carefully and press firmly in place.

If it is happened bubbles in flooring due to adhesive carefully rub the entire surface of rubber flooring using the cork border.

- ⑤ It is recommended to apply sufficient pressure over the floor using the 50kg roller.

Rolling works out any air bubbles and ensures the whole flooring contact with the adhesive.

The initial adhesion is low, so it sometimes is required to apply the weights, particularly at the seams, to maintain contact until the full curing time (24~48hours)

2) Precautions

- ▶ This curing time is important for the durable flooring, During this time it should not move any equipment and prohibit all foot traffic the installation site.

Additionally, It is recommended keeping the temperature constant in the installation site for 48 hours after the installation to aid in the curing processes

- ▶ Immediately remove the remaining adhesive on the product surface.

Use alcohol to remove ,but do not use the solvent such as acetone.



Maintenance

A well planned and regular maintenance is important to preserve the appearance and quality of the rubber floorings.






Apply the below method of management to maintain for the optimum floor conditions.

1. Initial cleaning (After installation)

.After installation, sweep the flooring and remove all dust using a vacuum cleaner.

- 1) Apply the flooring with diluted cleaning products following the manufacturer's instructions and allow the solution on the floor to act for about 5~10 minutes.
- 2) Wash the flooring using a mop or cleaning machine. (with pad or brush)
- 3) Remove the remaining detergents with wet vacuum.
- 4) Rinsing several times and dry completely.
- 5) To maintain good condition on the floor, apply the recommended wax 2~3 times.

2. Routine /daily Cleaning

	1.Sweep the flooring and remove all dust using a vacuum cleaner.
	2.Depending on the pollution level, use the cleaning agents. Apply the flooring with diluted cleaning products following the manufacturer's instructions and allow the solution on the flooring to act for about 5~10 minutes.
	3.If the flooring is coated, first remove waxing layer. Apply the flooring with diluted strip off products following the manufacture instructions and allow the solution on the floor to act for about 5~10 minutes. Wash the flooring using a mop or cleaning machine. (with pad or brush)
	4.Remove the remaining detergents with wet vacuum.
	5.Aply the wax with mop. Wait until wax dries and apply 2~3 times.



3) Recommended maintenance products

Neutral detergent	CAN DO (Ultrachem)	FORWARD (JohnsonDiversey)
wax	EXQUISIT (Ultrachem)	Complete (JohnsonDiversey)
Wax remover	Ultra Strip (Ultrachem)	Step-off (JohnsonDiversey)

4) Precautions

- ▶ Polishing machines : 150~350RPM (Exceed 350RPM can damage the flooring surface)
- ▶ Immediately remove the materials (ex. strong acid, strong alkali , oil) which may cause the discoloration or swelling of the product surface.
- ▶ Recommended brush and pad : soft nylon brush, white, red pad
- ▶ If neutralization work is not enough which It may cause the discoloration.
- ▶ The use of maintenance products are followed by the manufacturer instructions.
- ▶ Before use of maintenance products are strongly advised to carry out an initial test in small part.