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### The HMI Polyurethane Foam Difference

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**Why is HMI foam different?** HMI is the ONLY company that makes polyurethane foam from recycled material. HMI manufactures an environmentally friendly, dual component polyurethane foam for raising and stabilizing concrete. Our patented materials (U.S. Provisional Patent Application No. 61/583,295) are made from recycled components, making it the “greenest” polyurethane foam on the market. Available in 2, 4, 5 and 6 lbs. per cubic foot density (free spray), HMI has developed this revolutionary new foam that is setting new standards in polyurethane foam quality.

**A Foam for Every Application:**    ✓Residential    ✓Commercial    ✓Highway

Each foam is specifically designed for applications such as lifting, high density lifting, stabilization, and undersealing. Formulating with recycled foam, offers the advantage of using super charged raw materials that have already been quality foam. Recycled foam provides benefits like fast tact free time and a high compressive strength skin that avoids concrete adhesion and adds strength. Fast and aggressive expansion for lifting concrete, along with a 15 minute final cure time, allows for slab manipulation while adjusting for the perfect lift.

Poly Foam	Application
RR401	High density foam for lifting heavy slabs is ideal for highways and industrial flow projects with heavy traffic.
RR401G	Designed to set-up in wet or underwater conditions, without compromising the foam or density.
RR501	Formulated for joint stabilization and undersealing, when material flow is required.
RR601	Developed especially for infrastructure repair – DOT.

HMI’s process and material will provide long lasting repair to sunken or moving concrete slabs in need of lifting and/or stabilization. Our repair method has proven to be more cost effective for the customer and saves them time in completing their repairs. Time is of the essence, when considering commercial projects where productivity could be lost replacing slabs as opposed to the process of raising them with polyurethane foam.

*Innovative products to remedy concrete problems.*



Our polyurethane foam method uses the concrete slab itself as a means of delivering poly foams that raise concrete, fill voids, and stabilize soils. A 5/8” hole is drilled through the slab into the subgrade. A tapered delivery port is installed into the 5/8” hole. The injection gun is connected to the port. The injection gun delivers the polyurethane material through the port and slab. Expansion of the material occurs within seconds, compressing loose soils and raising concrete.

### Void Filling:

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Concrete settling is not the only issue our foams can solve. Voids under slabs are often present in areas where wash out or excessive settling have occurred. This material will weigh on average 15-25 times less than a traditional mud-jacking or cementitious grout mix, applying less stress on an already failed subgrade. The process for void filling is the same as concrete raising: drilling, port installation, and injecting the material.

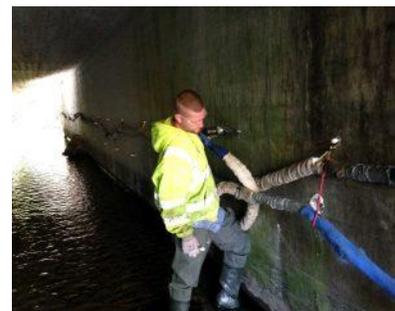
### Joint/Slab Stabilization:

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Slab stabilization is often required when slabs lack support but may or may not be settled. Slabs can crack when loads exceeding its capacity are applied. Slab/joint stabilization applications require the voids to be filled to eliminate movement and offer support. This type of foam is specifically designed for joint/slab stabilization applications due to its very long reaction time and minimal expansion strength. It will take longer to expand, allowing for better coverage under the slab or down a joint.

	Density ASTM 1622 (lbs./ft3)	Peak Compressive Strength ASTM 1621 (PSI)	Tensile Strength ASTM D1623 (PSI)	Time at Reaction (mm:sec)	Peak Exotherm (F °)	Time at Peak Expansion (mm:sec)	Time at Tack Free (mm:sec)	Time at Peak Expansion (mm:sec)
RR 201	2.5	43.2	63.8	0:10	255	0:24	0:18	0:32
RR 401	4	112.2	115.9	0:16	270	0:25	0:26	0:27
RR 401G	4	90	85	0:19	257	0:29	0:27	0:35
RR 501	5	114.9	123.6	0:53	208	1:26	1:21	1:45
RR 601	6.5	292.1	138.4	0:15	270	0:25	0:23	0:23

**Specifically designed for different applications, from lightweight residential concrete raising to high density polyurethane foam material for heavy highways and industrial flow projects, underwater settings to loose soil stabilizations.**



***Diversified Applications - Concrete Raising Reliability***

