

# Assembly Instructions for Drain Troughs

1. Make sure drain troughs are evenly supported.
2. Make sure drain troughs are sloped between  $\frac{1}{8}$ " &  $\frac{1}{4}$ " per foot. Drain troughs shipped inside our bulkheads will be pre-sloped.
3. When installing inlets in the side or top of troughs use proper size hole saw to drill through the trough (\*chart below shows hole sizes), then use a Uniseal coupling to seal the pipe fittings (see Uniseal instructions for proper installation). DO NOT drill through any seams or corners of troughs, always drill on a flat surface. Stand pipes and inlets on the top should be drilled through the removable top of the trough.
4. Never hard pipe from the machine to the trough, always have a rubber coupling on either the trough or the machine (both are preferable). (This enables you to clean out the drain if something becomes lodged and also keeps the vibration at the machine.)
5. Drain troughs are designed to support light foot traffic only and are not designed to support more than a 5 gallon pail of chemicals. NOTE: Removable top MUST be properly installed at all times—failure to do so will impair the structural integrity of the trough and will void any warranty, implied or written.
6. When installing troughs in the ground, never pour the floor and the troughs at the same time. Always provide a block out at least 4" larger than the trough. Place trough in ground and provide at least a  $\frac{3}{4}$ " barrier (foam or other material) before pouring concrete around trough.
7. **For Polypropylene (white) troughs: Trough must be supported 6" from ends and every 12" along the full length of trough. Failure to do so will cause it to sag and crack over time and will void any warranty, expressed or implied.**

Please visit our website at [www.highmarkmanufacturing.com](http://www.highmarkmanufacturing.com) for more information.

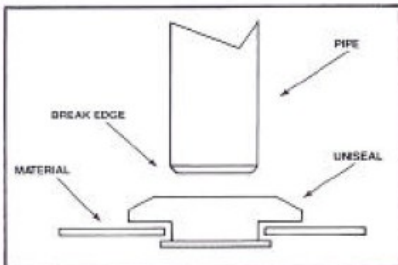
* U125	Pipe Seal for 1-1/4" piping (1.660" OD), through 2" hole
U150	Pipe Seal for 1-1/2" piping (1.900" OD), through 2-1/2" hole
U200	Pipe Seal for 2" piping (2.375" OD), through 3" hole
U300	Pipe Seal for 3" piping (3.500" OD), through 4" hole
U400	Pipe Seal for 4" piping (4.500" OD), through 5" hole

IF ANY REPAIR BECOMES NECESSARY, PLEASE CONTACT FACTORY FOR INSTRUCTION.

# Assembly Instructions for Uniseal Couplings

UNISEAL is a new pipe-to-tank seal (grommet) that provides positive mechanical sealing for a wide range of pipe and tubing.

UNISEAL was designed for holding tanks but works well in any application where pipe penetrations are required. Proved applications include: waste water tanks, sump risers, pumping stations, dispenser pans, valve boxes, junction boxes, cooling systems and boats to name a few. It is ideal for use with PVC, galvanized steel, copper, EMT, rigid conduit, fiberglass and polyethylene pipe.



UNISEAL was designed for pipes of standard outside diameter (SCH 40). The tapered inner diameter forces the outer diameter to expand and securely seal the penetrating pipe/tubing without adhesive hardware or threads. It will seal for any flat or curved material even if the pipe is at an angle as great as 15°.

UNISEAL is made from Alcryn,<sup>®</sup> a tough, pliable thermoplastic developed by DuPont. It has excellent resistance to most chemical compounds, petroleum products, methanol, ethanol and most soil conditions.

The following is a summary of SEVEN DAY IMMERSION TESTS performed by E.I. DuPont on Alcryn.<sup>®</sup> UNISEAL is 100% Alcryn.

FLUID AND IMMERSION CONDITIONS	PROPERTIES					
	100% MODULUS, PSI	TENSILE STRENGTH, PSI	ELONGATION, %	HARDNESS, A	WEIGHT CHANGE, %	VOLUME CHANGE, %
CONTROL	575	1200	350	72		
UNLEADED GAS	477	1021	273	57	23.02	30.2
JET FUEL A	586	1337	390	85	4.67	10.32
JP-4	577	1325	393	62	2.15	8.77
AVIATION GAS	824	1412	40	70	-5.02	0
FUEL C & 15% METHANOL	438	481	122	46	65.59	101.14
FUEL C & 15% ETHANOL	492	585	128	48	58.57	91.00
DIESEL FUEL	619	1447	385	66	4.89	9.04
70% SULFURIC ACID	592	1251	293	68	0	0

Alcryn E-2070 BK

Testing shows that, in most cases, Alcryn expands slightly, thus improving the seal.

## INSTALLATION INSTRUCTIONS

1. Place UNISEAL into clear cut entry hole.
2. Apply UNI-SLICK to inside diameter of UNISEAL.
3. Apply UNI-SLICK to outside diameter of pipe to be introduced.
4. Force pipe through the UNISEAL.
5. Apply additional UNI-SLICK to the pipe and UNISEAL as needed.

Hole saws, lubricants, adhesives and the full line of complimentary products are available through Topp Industries or Topp distributors.



\*ALCRYN<sup>®</sup> is a trademark of E.I. DuPont Co., Inc.

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\*Use liquid soap in place of "UNI-SLICK" to lubricate UNISEAL.

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