



S DUMBBELL TYPE SD TPV / TPE - R



LEVAJOINT SD TPV / TPE-R Waterstop's raw materials, referred to as "thermoplastic rubbers", are a copolymer or a physical mix of polymers (pvc and a rubber) which consist of materials with both thermoplastic and elastomeric properties. **LEVAJOINT SD TPV / TPE-R** Waterstops show both advantages typical of rubbery materials and plastic materials. The principal advantage of **LEVAJOINT SD TPV / TPE-R** Waterstops is the type of cross linking bond in their structures. In fact, cross linking is a critical structural factor which contributes to impart high elastic properties. The crosslink in thermoset polymers is a molecular bond created during the vulcanization process. **LEVAJOINT SD TPV / TPE-R** Waterstops is unaffected by concrete additives and most water solutions of organic chemicals, resist a wide range of oils, solvents and aggressive chemicals and are not readily soluble in any common solvent. Alcohols, ketones, glycols, esters and aqueous solutions of acids, bases and salts have little effect on **LEVAJOINT SD TPV / TPE-R** Waterstop.

USES

- Water/Waste Water Treatment Plants
- Lock and Dam Systems
- Reservoirs and Aqueducts
- Flood Walls
- Retaining Walls
- Foundations
- Tunnels and Culverts
- Bridge Abutments
- Containment Structures and Tanks
- Slabs-on-Ground.

CHOICE OF WATERSTOP'S SIZE

In order to choose the appropriate width of **LEVAJOINT SD TPV / TPE-R** Waterstop, concrete thickness, position of reinforcement and aggregate size and plasticizers uses are concerned. It is essential that concrete is properly englobing it.

As a general rule, the concrete's thickness should be equal or bigger than the **LEVAJOINT SD TPV / TPE-R** Centrally fixed waterstop's width.

For concrete slabs having a thickness of less than 250 mm, a smaller section similar to the slab thickness will be more adequate.

TECHNICAL DATA

LEVAJOINT SD TPV / TPE-R has three essential characteristics:

- The ability to be stretched to moderate elongations and, upon the removal of stress, return to something close to its original shape.
- Processable as a melt at elevated temperature.
- Absence of significant creep.

PROPERTY	STANDARDS & NORMS	NOMINAL VALUES
Hardness Shore A (± 3)	ASTM D-2240	85
Tensile Strength	ASTM D- 412	2100 psi (14.47 MPa)
Ultimate Elongation	ASTM D-638	480%
100% Modulus	ASTM D-638	1050 psi (7.24 MPa)
Brittle Point	ASTM D-746	-69°F (-56°C)
Stress@ 100% Elongation, psi	ASTM D-638	1000
Ozone Resistance	ASTM D-1171	Passed 460 pphm
Peel Strength @ 23°C	ASTM D-816 mod.	22 pli

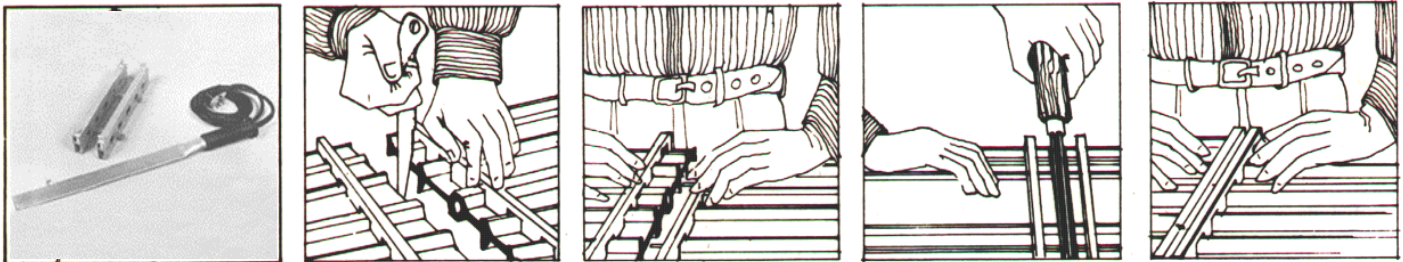
SPLICING

LEVAJOINT SD TPV / TPE-R PVC Waterstop may be butt-spliced on the job, with an electrical splicing iron. There is no need for skilled labor to do it. Crimping, shaping, brazing or vulcanizing is not necessary.

The following figures illustrate the splicing method to produce strong water-tight butt weld. Elbows tees and crosses can also be produced using this method.

A splicing iron is the recommended tool for splicing PVC Waterstops . In most instances, although a hot metal plate is still usable where an electric outlet is not available. Where the number and type of welds warrant it, the use of a hot air welding gun and vinyl welding rod is recommended. *Complete LEVAJOINT SD TPV / TPE-R welding kits, comprising LEVAJIGS and LEVAKNIFE are available on request.*

WELDING PROCEDURE



Be sure that: The LEVAKNIFE is clean, plug it into the correct voltage (220V) electricity supply and let it warm up.

The ends of LEVAJOINT SD TPV / TPE-R Waterstop to be welded are identical, clean them with water or a solvent without oil, and dry them.

Clamp the ends of LEVAJOINT SD TPV / TPE-R to be welded in the LEVAJIGS and cut both ends with a sharp cutter, flush with the faces of the LEVAJIGS.

Open the LEVAJIGS and slide them back, leaving around 10mm of each end appearing , clamp the LEVAJIGS tightly in position , then locate the projecting bars of one jig in the holes of the other . Place the LEVAKNIFE on the bars between the jigs and slide them together until the LEVAJOINT SD TPV / TPE-R Waterstop ends are pressed firmly against of the LEVAKNIFE's blades.

The LEVAJOINT SD TPV / TPE-R should melt without burning or carbonizing.

Hold the LEVAJIGS firmly in position until molten PVC beads appear along both sides of the LEVAKNIFE.

Slide the LEVAJIGS back a little and remove the LEVAKNIFE up so that it takes as little PVC as possible with it. Join the molten ends of the LEVAJOINT SD TPV / TPE-R by sliding the jigs together by exerting pressure holding the ends firmly together for around 25 seconds to allow molten PVC to fuse completely. Put the LEVAKNIFE off. As it is still hot, clean well the LEVAKNIFE preparing it for the next joint welding.

Without bending the LEVAJOINT SD TPV / TPE-R , unfasten the LEVAJIGS and remove carefully the LEVAJOINT SD TPV / TPE-R Waterstop.

When the LEVAJOINT SD TPV / TPE-R comes cold, test it by bending it several times, in order to be sure of the melting procedure success.

P.S. Where an electrical outlet is not available, the use of a hot metal blade is possible, provided this blade is heated with a clean flame.

When the required temperature is reached, the LEVAJOINT SD TPV / TPE-R will melt easily when touched against the blade.

Keep attention to the blade's temperature, if it is too hot, the LEVAJOINT SD TPV / TPE-R will carbonize.

HEALTH AND SAFETY

Hot weld site jointing of PVC LEVAJOINT SD TPV / TPE-R Waterstops results in the liberation of hydrochloric acid fumes. Therefore, good ventilation must be provided or a suitable respirator used in closed places. In open places, such precautions are not necessary as no danger to health exists.

PRECAUTIONS

Avoid drive nails through center of waterstop when forming.

Never lap waterstop .

All joints must be sealed with a heat sealing method.

Avoid embedding center bulb in concrete. It must be positioned in the center of the joint to insure freedom of movement and proper expansion.

Catalog No.	Description	Meters/Roll	Special Length
LJ 010 PWP	Plain Web 10 cm	25	Upon request
LJ 017 PWP	Plain Web 17 cm	25	Upon request



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