WIRELOCK®

WARNINGS AND APPLICATION INSTRUCTIONS

WARNING

- Incorrect use of WIRELOCK[®] can result in an unsafe termination which may lead to serious injury, death, or property damage.
- Do not use WIRELOCK[®] with stainless steel rope in salt water environment applications.
- Use only soft annealed iron wire for seizing.
- Do not use any other wire (copper, brass, stainless, etc.) for seizing.
- Never use an assembly until the WIRELOCK[®] has gelled and cured.
- Remove any non-metallic coating from the broomed area.
- Non Crosby sockets with large grooves need to have those grooves filled before use with WIRELOCK[®].
- Read, understand, and follow these instructions and those on product containers before using WIRELOCK[®].

The following simplified, step-by-step instructions should be used only as a guide for experienced, trained users. For full information, consult our document *WIRE ROPE END TERMINATIONS USERS MANUAL, API (AMERICAN PETROLEUM INSTITUTE) RECOMMENDED PRACTICE 9B, ISO standards, WIRE ROPE MANUFACTURERS CATALOGS, and WIRE ROPE SLING USERS MANUAL.*

STEP 1 – SOCKET SELECTION

- WIRELOCK[®] is recommended for use with Crosby 416-417 Spelter Sockets. Structural strand requires a socket with the basket length approximately 5 times the strand diameter or fifty (50) times the wire diameter, what ever is greater to achieve 100% efficiency. Consult The Crosby catalog for proper selection of Wire Rope or Structural Strand sockets.
- For use with sockets other than Crosby 416-417 consult the socket manufacturer or Crosby Engineering.
- 3. Sockets used with **WIRELOCK**[®] shall comply with Federal or International (CEN, ISO) Standards.
- 4. WIRELOCK[®], as with all socketing media, depends upon the wedging action of the cone within the socket basket to develop full efficiency. A rough finish inside the socket may increase the load at which seating will occur. Seating is required to develop the wedging action.

STEP 2 – MEASURE AND SEIZE

The rope ends to be socketed should be of sufficient length so that the end of the unlaid wires (from the strands) will be at the top of the socket basket. Seizing should be placed at a distance from the end equal to the length of the basket of the socket.

Basket Length after unlaid 2 D + --D

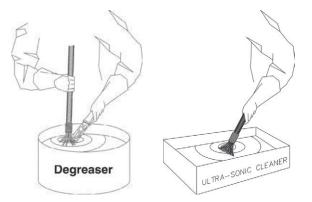
STEP 3 – BROOMING

- Unlay the individual strands and fully broom out the wires of the wire rope and IWRC as far as the seizing. The wires should be separated but not straightened.
- 2. Cut out any fiber core.
- 3. Unlay the individual wires from each strand, including the IWRC, completely, down to the seizing.
- 4. Remove any plastic material from broomed area.



STEP 4 – CLEANING

- 1. The method of cleaning will depend on the lubricant and/or coating on the wire.
- 2. The methods and materials used for cleaning should comply with the current EPA regulations.
- Consult your Wire Rope supplier or Wire Rope manufacturer for recommended material and methods. Follow the solvent supplier's recommendations for cleaning the broomed end.



STEP 5 – POSITIONING OF SOCKET

- Position socket over the broom until it reaches the seizing on the wire rope. The wires should be LEVEL with the top of the socket basket.
- 2. Clamp rope and socket vertically ensuring alignment of their axes.
- 3. CAUTION: DO NOT USE OVERSIZED SOCKETS FOR WIRE ROPE.

30 D STRAIGHT BEFORE BEND

STEP 6 – SEAL SOCKET

Seal the base of the socket with putty or plasticine to prevent leakage of the **WIRELOCK**[®].

STEP 7 – WIRELOCK® KITS

- WIRELOCK[®] kits are pre-measured and consist of two (2) containers – one (1) with resin and one (1) with granular compound.
- 2. Use the complete kit NEVER MIX LESS THAN THE TOTAL CONTENTS OF BOTH CONTAINERS.
- 3. Each kit has a shelf life clearly marked on each container and this must be observed. **NEVER USE OUT OF DATE KITS.**

- WIRELOCK[®] resin, in liquid state, is flammable.
- Chemicals used in this product can give off toxic fumes and can burn eyes and skin.
- Never use out-of-date material.
- Use only in well-ventilated work areas.
- Never breathe fumes directly or for extended time.
- Always wear safety glasses to protect eyes.
- Always wear gloves to protect hands.
- Avoid direct contact with skin anywhere.

STEP 8 – MIXING AND POURING

- Mix and pour WIRELOCK[®] within the temperature range of 48 degrees to 110 degrees F. Booster kits are available for reduced temperatures.
- 2. Pour all the resin into a container containing all the granular compound and mix thoroughly for two (2) minutes with a flat paddle.
- The WIRELOCK[®] will turn a green blue color. If it does not turn a green blue after mixing, DO NOT USE.
- 4. Immediately after mixing, slowly pour the mixture down one side of the socket until the socket basket is full.
- 5. Check for leakage at nose of socket, add putty if required.





STEP 9 – CURING

- 1. **WIRELOCK**[®] will gel in approximately 15 minutes, in a temperature range 65 degrees F to 75 degrees F.
- 2. The socket must remain undisturbed in the vertical position for an additional ten (10) minutes after gel is complete.
- 3. The socket will be ready for service 60 minutes after gelling.
- 4. Never heat sockets to accelerate gel or curing.

STEP 10 – RE-LUBRICATION

Re-lubricate wire rope as required.

STEP 11 – PROOF LOADING

Whenever possible, the assembly should be proof loaded. All slings with poured sockets, in accordance with ASME B30.9, shall be Proof Loaded.

ALTERNATE SEIZING AND BROOMING METHOD

Reference the *Wire Rope End Terminations User's Manual* from Crosby for an alternative socketing method.