

Scope

This specification covers packaging and labeling for products and materials that are received and stored for use in Puget Sound Energy's (PSE's) natural gas and electric systems.

Explanation of the *Optional*— Reference

Not all of the sections in this specification will be applicable to all products. This specification contains several optional sections with supplemental requirements only applicable if they are referenced by other PSE specifications or PSE Purchase Orders (noted as "*Optional*—").

Use of This Specification with Coded and Non-Coded Materials

This specification is written to be applicable to materials that PSE has assigned a Material Identification (MID) Number (also known as "coded" materials). If this specification is used in the purchase of non-stock materials (also known as "non-coded"), the references to the PSE MID number may apply.

Contact PSE's Supply Chain Management (SCM) for clarification of any of these requirements.

References

- ASTM F2897 – Standard Specification for Tracking and Traceability Encoding System of Natural Gas Distribution Components (Pipe, Tubing, Fittings, Valves, and Appurtenances)
- CFR Title 49 – Transportation

Requirements

1. General Packaging and Labeling Requirements

- 1.1 Materials shall be packaged in a manner to protect the material from damage during shipping and normal warehouse handling.
 - A. Materials within boxes or crates shall be padded or secured to minimize movement and damage during shipping and handling.
 - B. Sensitive elements (e.g., threads, flanges, connectors, or displays) may require temporary protective caps or similar measures.
 - C. Materials that are sensitive to UV damage shall be protected using adequate light-blocking methods.
 - D. Structural packaging materials (e.g., pallets or reels) that are weak, damaged, or dilapidated may not be accepted.
- 1.2 Except for small individual cartons and large materials, such as poles and pipe joints, materials shall be palletized for handling by forklift. See Section 2.
- 1.3 A master container (e.g., pallet, gaylord, crate, box) may be made up of several smaller inner containers of material.
 - A. Master containers must be marked per Section 1.4 on the outside of the packaging.
 - B. If the master container has boxed, bagged, reeled, or otherwise packaged material, the inner containers must also be marked per Section 1.4.
 - C. Master containers of mixed material are permitted. Mixed containers must be marked with the PSE Purchase Order and be clearly marked as "MIXED."

- 1.4 All master containers and all inner containers shall be labeled with:
- A. Manufacturer's name or trademark
 - B. Manufacturer's part or catalog number
 - C. Name or description of item
 - D. Quantity of material
 - E. PSE MID Number
 - F. PSE Purchase Order Number
 - G. **Optional—**
 - 1. The lot numbers contained in the package (batch numbers, heat numbers, or serial numbers).
 - 2. Country of origin, where the material was manufactured or assembled.
 - 3. Expiration date of the material, if it has a manufacturer-defined shelf life.
 - 4. Gross container weight.

2. Pallet Requirements

- 2.1 Materials or boxes shall be secured to the pallet.
- 2.2 Pallets that are damaged during shipping and handling may not be accepted.
- 2.3 Unless otherwise specified in the PSE Purchase Order text, materials shall be packed using the preferred maximum pallet dimension of 48 inches (typical 40 inches x 48 inches).

3. Packing List Requirements

- 3.1 All materials shall come with a Packing List or Bill of Lading that details the materials included with each shipment.
- 3.2 At a minimum, the Packing List shall contain the following information for each item:
 - A. Manufacturer's name or trademark.
 - B. Manufacturer's part or catalog number.
 - C. Quantity of material.
 - D. PSE MID Number.
 - E. If the shipment includes supplemental documentation for this item (test records, certifications, Mill Test Reports, etc.), this shall be noted on the Packing List.
 - F. **Optional—**The lot numbers contained in the shipment (batch numbers, heat numbers, or serial numbers).
- 3.3 If the material supplier is different from the manufacturer, the following information shall be included:
 - A. The supplier's name
 - B. The supplier's contact information
 - C. The suppliers part or catalog number, if applicable

4. Optional—Documentation Requirements, Steel Pipe and Fittings

- 4.1 All pipe and fittings shall be accompanied by supporting documentation covering all requirements of the governing referenced standard. Documentation shall reference heat number(s) or lot number(s) included in the shipment.
- 4.2 Material Test Reports (MTRs) or Mill Certificates of Compliance certify that the chemical analysis and mechanical properties are in conformance with the governing specification.
- 4.3 Electronic Data Interchange (EDI) certification shall not be acceptable unless specified on the PSE Purchase Order.
- 4.4 The manufacturer shall retain all records for a period of at least three years from the date of manufacture and they shall be made available to the purchaser upon request in accordance with the governing referenced standard.
- 4.5 Heat number(s) or lot number(s) shall be called out on each line of the Packing List or Bill of Lading.
- 4.6 Heat number(s) or lot number(s) shall be clearly and legibly marked on each pipe or fitting (such as by stamping, stenciling, or tagging).
 - A. If allowed in the PSE Purchase Order, the lot number or heat number may be marked on the packaging (rather than each individual part) as long as all the parts within the marked carton correspond to the same heat/lot number.

5. Optional—Documentation Requirements, Serial Numbered Gas Parts (Metallic Valves etc.)

- 5.1 All fittings and equipment shall be accompanied by supporting documentation covering all requirements of the governing referenced standard. Documentation shall reference serial number(s) included in the shipment.
- 5.2 Documentation shall include individual unit test reports (such as hydrostatic pressure testing) required by the governing referenced standard, as well as materials information for subcomponents (if applicable). MTRs or Mill Certificates of Compliance certify that the chemical analysis and mechanical properties are in conformance with the governing specification.
- 5.3 Electronic Data Exchange (EDI) certification shall not be acceptable unless specified on the PSE Purchase Order.
- 5.4 The manufacturer shall retain all records for a period of at least three years from the date of manufacture and they shall be made available to the purchaser upon request in accordance with the governing referenced standard.
- 5.5 Serial number(s) shall be called out on each line of the Packing List or Bill of Lading.
 - A. A serial number list may also be attached as separate document if noted on the Bill of Lading.
- 5.6 Serial number(s) shall be clearly and legibly marked on each fitting or piece of equipment either using a nameplate or by stamping, stenciling, or tagging.
 - A. If items are boxed or crated such that the item tag is not visible, the serial number(s) and model number(s) shall be labeled on the outside of the box.

6. *Optional*—ASTM F2897 Labeling Requirements

- 6.1 ASTM F2897 labeling applies to gas materials as follows:
 - A. All plastic gas piping and components shall be labeled according to the guidance in ASTM F2897.
 - B. All factory gas piping assemblies, including plastic components, shall be labeled according to the guidance in ASTM F2897.
 - C. Metallic gas piping and components may be labeled according to the guidance in ASTM F2897 at the manufacturer's discretion. All parts that include ASTM F2897 labeling shall meet the requirements of this section.
- 6.2 The ASTM F2897 code shall be labeled on each component by using a printline, tag, or sticker.
- 6.3 The ASTM F2897 code shall also be encoded into a barcode or two dimensional barcode (QR code) on the printline or label. The barcode shall have sufficient contrast to the background such that it can be readily scanned.
- 6.4 The printline, label, or sticker shall be durable and attached securely to the material such that normal shipping and handling will not damage or affect the readability of the label.
- 6.5 Each package containing ASTM F2897 material shall be labeled on the outside of the package with the ASTM F2897 code and the accompanying barcode or QR code. If a package contains parts that come from more than one lot number, the packaging label shall identify all ASTM F2897 codes contained therein with barcodes for each.

7. *Optional*—Cable and Wire Requirements

- 7.1 This section is meant to clarify and give guidance in addition to all applicable PSE specifications. All CFR Title 49 requirements for transportation shall apply.
- 7.2 In addition to the basic labeling requirements found in Section 1, each reel or coil must come with a tag that has at minimum the following information:
 - A. Purchase Order
 - B. Manufacturer
 - C. Purchaser name
 - D. Product description (such as voltage class, conductor size, code name, conductor type, jacket type, and insulation thickness and type)
 - E. Total footage on reel or in coil
 - F. Gross shipping weight of reel or coil
 - G. Tare weight of reel
 - H. Tare weight of cable or wire
 - I. Beginning and ending footage numbers, if marked on the jacket per reel
 - J. Lot, run, batch, or other identifying number, if applicable

- 7.3 Pack slips must be included with the shipment and shall include the following:
- A. For wire and cable that are variable in footage and have sequential footage markings:
 1. Total footage on the reel or in the coil
 2. Gross shipping weight of the reel or the coil
 3. Tare weight of the reel
 4. Tare weight of the cable or the wire
 5. Beginning and ending sequential footage numbers, if marked on the jacket per reel
 6. Lot, run, batch, or other identifying number, if applicable per pack slip line and reel
 - B. For wire and cable that are standard footage lengths and have sequential footage markings:
 1. Total footage on the reel or in the coil
 2. Gross shipping weight of the reel or the coil
 3. Tare weight of the reel
 4. Tare weight of the cable or the wire
 5. Beginning and ending sequential footage numbers, if marked on the jacket per reel
 6. Lot, run, batch, or other identifying number, if applicable per pack slip line and reel
 - C. For wire and cable that do not have sequential footage marking:
 1. Total footage on the reel or in the coil
 2. Gross shipping weight of the reel or the coil
 3. Tare weight of the reel
 4. Tare weight of the cable or the wire
 5. Lot, run, batch, or other identifying number, if applicable per pack slip line and reel
- 7.4 The ends of jacketed wire and cable must be capped in a way to prevent moisture damage.
- 7.5 Reels shall be free of protrusions that might damage the material or that might catch on workers or equipment while the reel is spinning.
- A. Any fasteners, used to secure tags, reel ends, or any other purpose, must not exceed the depth of the reel flange to avoid damage to the cable.
- 7.6 Unless specifically permitted otherwise:
- A. The cable shall be shipped with the reel flanges vertical on an open truck, so the reels can be unloaded from the side of the truck with a forklift. The reels shall be secured to prevent movement during transit and to prevent the flanges of one reel from damaging the cable on another reel.
 - B. If the cable or wire is shipped in a covered trailer, it must be properly braced to prevent rolling and damage, as well as be loaded in a way that ensures a forklift can properly engage the wire from the face of the flange.
 - C. If specific permission is given for stacking reels on the flange, the reels must be on a pallet, and the reels must have a security post (e.g., 2" x 2") through the mandrel holes to prevent shifting. There shall also be spacers (e.g., 2" x 2" or 2" x 4") between the reels.

- 7.7 The inside end of the wire or cable shall be securely fastened to the reel flange with adequate length on the inside end to allow the conductor to be grounded if necessary.
- 7.8 Additional information about acceptable reel sizes, footage minimums and maximums, recycled reels, and recycled reel standards can be found in the PSE specification for the respective wire and cable types.
- 7.9 In no way should paint or other coverings (such as tags and protective wire covers) be used to cover damaged reels, wire, or cable.
- 7.10 Steel reel return policies must be negotiated through PSE's SCM and will be facilitated in conjunction with the operations groups using the product, as well as SCM.