



# Submittal Information for Spears® Manufacturing Company Double Containment Piping System

GSDC-0622

Date: \_\_\_\_\_

Job Name: \_\_\_\_\_ Location: \_\_\_\_\_

Engineer: \_\_\_\_\_ Contractor: \_\_\_\_\_

**Scope:**

This submittal covers Spears® PVC & CPVC Double Containment System fittings intended for use in pressure and drainage applications.

**Product Specification:**

Thermoplastic Double Containment System shall be a floating carrier design constructed from conventional pipe and fittings meeting applicable ASTM requirements for all standard configurations of primary carrier and secondary containment. System shall include all pipe, fittings, centralizers, valves and valve boxes to be supplied by Spears® Manufacturing Company. Standard configurations (tees, elbows, crosses, etc.) of primary carrier fitting shall be equipped with extender couplings for installation in secondary containment pipe and fittings. Primary carrier system shall be supported by polypropylene slide-on centralizer brackets positioned with clean room adhesive. Centralizers shall provide annular space suitable for drainage or installation of user-supplied leak detection cable. Specialty fittings shall be according to manufacturer's specifications and suitable for use with specified primary carrier and secondary containment system. Specialty fittings include the following:

- a) Termination Fitting for start and stop of secondary containment.
- b) Closure Fitting for joining two (2) secondary containment lines that meet.
- c) Expansion Joint/Coupling for thermal expansion/contraction compensation or joining of pipelines.
- d) Sensor Saddles for connection of user-supplied leak detection apparatus.
- e) Any other custom fitting configuration designed for the system.

Double Containment System shall be air-vented in the secondary containment to prohibit pressurization in excess of 10 psi. Valve Box enclosure for ball and ball check valves shall be Tee-Style with specified valve installed and [option: external stem extension]. Double Containment installation training is recommended. Contact Spears® to schedule a training class.

**Product Marking:**

All PVC pipe shall be marked ASTM D1785, applicable pressure @ 73° F. (23°C) with NSF® Listing for use in potable water. All CPVC pipe shall be marked with ASTM F441 (Schedule), F2618 (Corrosive Waste), applicable pressure @ 73° F. (23°C) with NSF® Listing for use in potable water or Corrosive Waste as applicable. All CPVC pipe shall have ICC-ES PMG E84 25/50 rated marking and UL GREENGUARD GOLD marking. Molded fittings shall be marked as follows:

PVC Schedule 40 Fittings - ASTM D2466

CPVC Schedule 80 Fittings - ASTM F439

LabWaste® CPVC Fittings - F2618

All fittings shall bear an NSF® Listing for potable water/ corrosive waste as applicable.

**Installation:**

Double Containment System shall be installed in accordance with Spears® Double Containment Design & Installation Guide (DC-3), established industry practices and all applicable code requirements. Installation shall be made by qualified personnel trained in making solvent cement joints per ASTM practice D2855, and flanged joint assembly according to manufacturer's instructions. Primary carrier and secondary containment pipe and fitting connections shall be made by conventional solvent cement welding. Flanged assembly connections may be used where required for disassembly or as a design necessity. Solvent cement shall be in accordance with ASTM D2564(PVC) F493(CPVC) F2618 (LabWaste®). All Primer shall conform to ASTM F656. Solvent cement and primer shall be Spears®. Installation training is recommended with a qualified individual from Spears® Manufacturing Company.

**Referenced Standards:**

- ASTM D1785 - PVC Schedule 40, 80, 120 Pipe
- ASTM D2466 - PVC Schedule 40 Fittings
- ASTM D2467 - PVC Schedule 80 Fittings
- ASTM D2564 - Solvent Cements for PVC Pipe & Fittings
- ASTM D2855 - Practice for Making Solvent Cemented Joints
- ASTM F439 - CPVC Schedule 80 Fittings
- ASTM F441 - CPVC Schedule 40, 80 Pipe
- ASTM F2618 - CPVC Corrosive Drainage Piping System
- ASTM/E84 - Flame & Smoke Testing
- ASTM F493 - Solvent Cements for CPVC Pipe & Fittings
- ASTM F656 - Primers for PVC Pipe & Fittings

**Approvals:**

- NSF - NSF International Water
- ICC-PMG 1278 - Listing for Plenum Use
- UL - GREENGUARD GOLD Certified UL 2818

**PROJECT APPROVAL**

Approved: \_\_\_\_\_  
PRINT

Sign: \_\_\_\_\_

Date: \_\_\_\_\_

