



FAQ Piping FAQs

1. What are the inspection requirements for installation of welded steel piping for refrigeration systems?

A: For any system installed, modified, or repaired using welded steel piping, a contractor must complete a [SBD-5204](#) registration form and arrange an inspection at least five business days prior to the start of fabrication (all welded steel piping shall be fabricated to ANSI B31.5, 2001 std. pipe welders need welder qualifications per piping code ASME B31.5 and ASME Section IX.) and in accordance with [SPS 345.30](#) and [SPS 345.31](#). See the [Refrigeration Systems Gas and Anhydrous Ammonia inspector map](#).

2. What is required if two solenoid valves are added to a refrigeration system? The equivalent length of pipe involved is under 20 feet and a max of 1-1/4 inch.

A: Assuming the piping and solenoid valves are new and welded, [SPS 345.31](#) requires inspection.

[SPS 345.31\(2\)\(b\)](#):

1. All refrigerant steel piping that will employ welded joints shall be inspected by the authorized agent or the department after the piping material is delivered to the job site and prior to installation of the piping.

2. The authorized agent or the department shall be given a minimum of 5 business days' notice prior to the start of construction to arrange for inspections under this paragraph.

3. If applicable and if required by the authorized agent or the department, the following documents shall be made available for review during inspections under this paragraph:

- a. Welding procedure specification.
- b. Procedure qualification record.
- c. Welder performance qualification.
- d. Welder continuity record.
- e. Design calculations.
- f. Design plans for the piping system.
- g. Material test reports.
- h. Certificates of compliance.

4. Form [SBD-5204](#) shall be completed and be retained at the job site for reference during inspections under this paragraph. If the design of the piping is acceptable, the authorized agent or the Department shall sign the form.

[SPS 345.31\(2\)\(c\)](#): Welded, prefabricated steel piping that is part of a mechanical refrigeration system to be erected on a job site shall be inspected at the fabrication shop by the authorized agent or the Department – or, for out-of-state fabricators, by an inspector commissioned by the national board of boiler and pressure vessel inspectors. The fabricator shall make a copy of the inspection report or a copy of the completed form [SBD-5204](#) available to the installer at the job site verifying that the prefabricated piping complies with ASME B31.5. Design calculations for the prefabricated piping shall be provided to the authorized agent or the Department if so requested.

[SPS 345.31\(2\)\(d\)](#): Within 5 business days of completing the installations and inspections under par. (b) or (c), a copy of the completed [SBD-5204](#) form shall be filed with the authorized agent or the department, unless additional time is granted by the authorized agent or the Department.