

Corrugated Stainless Steel Tubing (CSST) for Residential Construction.

Policy No.: CPC 1210.1-1

Effective Date:

Rev. November/2001

Rev. July/2004

Revised: May 3, 2006

This policy shall be applied to the 2001 California Plumbing Code, Section 1210.1, as amended by the California Division of Housing and Community Development. Due to the unique installation requirements of CSST, and Potential for damage during and after installation, review and plan check shall be required prior to any installation of CSST. Residential projects shall be allowed to utilize low pressure (less than 14" water column) system only.

Compatibility –

Each CSST gas piping system is required to utilize only one manufacturer's product. Due to the unique design of fittings, and specific sizing criteria by each maker, intermixing of CSST systems is not acceptable CSST may be used with other approved gas piping materials in a manner specified by the CSST manufacturer's installation instructions.

Sizing –

As part of the pre-approval process for CSST, an accurate drawing of the entire gas piping system (new and existing) with the manufacturer's sizing criteria shall be submitted to and approved by the Administrative Authority prior to installation. The pressure provided by PG&E is assumed to be 7" of water column pressure. Additional pressures of up to 14" of water column may be approved but will require agreement by PG&E to supply gas at this pressure. System that requires gas at pressure exceeding 14" of water column will not be approved. The drawing shall accurately show the following:

- Total system developed length and each branch length.
- Demand at each point-of-use in BTU's (input).
- The sizing calculations for each section of the system.

One copy of the approval drawings shall be kept on the job site for the inspector's use, the others shall be retained in the office. Field deviations from the approved design shall require re-submittal of the design drawings and new sizing calculations prior to installation and inspection. Appropriate plan review fees will be applicable based on the current fee schedule.

Installation –

The installation of CSST shall be performed only by persons who have been trained and certified by the manufacturer of the product. A current certification card must be presented at the time of permit issuance and each field inspection. The certified installer shall be present at each gas piping inspection where CSST is installed.

- All gas piping house side of the systems which utilize CSST shall be permanently identified by use of a metal tag, attached to the gas meter outlet, identifying the CSST manufacturer
- **The manufacturer's installation instructions shall be on-site for each inspection.**

- The use of CSST shall be limited to the interior of buildings, at least 6” above grade.
- A protection device must be installed at all locations where tubing is constrained from movement, concealed from view and/or within 3” of a potential penetration threat, or as required by the manufacturer.
- Adequate provisions for protection against physical damage, sunlight, chemical damage, etc., or as required by manufacture must be approved prior to installation.
- All appliance connectors CSST installed in a basement or under floor crawl space shall be attached to the sides of floor joists or girders. When required to run perpendicular to joists, a 2x4 running board shall be provided immediately adjacent to the CSST. The CSST shall not be attached to the running board.
- In attics, CSST shall be attached to the sides of ceilings joists or the bottom chord of trusses. Where required to run perpendicular to joists or trusses, 2x4 running boards on each side of the CSST shall be provided.
- CSST shall be reviewed on a case by case basis in locations where the tubing movement may be restricted or potentially damaged due to greater exposure from nailing and/or stapling than intended by the manufacturer.
- All manufacturer’s requirements or recommendations for protection and installation of CSST shall be followed.

Testing and Inspections –

- All portions of the CSST system shall be installed and all required protection components for CSST shall be completed prior to the rough-in inspection, and no portion of the system shall be concealed without approval of the administrative authority. At the time of the rough-in inspection, the installer shall be present and shall provide proof that all connecting fittings are properly assembled to the manufacture’s joining, splicing, and torquing specifications.
- All other non-CSST portions of the gas piping system shall be inspected as required by the 2001 California Plumbing Code (CPC).
- The final gas inspection shall include a visual inspection of all exposed portions of the gas piping system, as well as a complete system pressure test as specified in the CPC.
- Inspections of CSST are made by the Division’s Specialty Plumbing Inspectors.

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