7210.1. Description. This Specification describes the material requirements for composite material posts and blocks for use with metal beam guard fence. It also outlines the qualification procedures to produce these materials for Department projects.

7210.2. Units of Measurements. The values given in parentheses (if provided) are not standard and may not be exact mathematical conversions. Use each system of units separately. Combining values from the two systems may result in nonconformance with the standard.

7210.3. Material Producer List. The Materials and Pavements Section of the Construction Division (CST/M&P) maintains the Material Producer List (MPL) of all materials that meet the requirements of this Specification. Only use materials that appear on the MPL, titled “Composite Material Blocks and Posts for Metal Beam Guard Fence,” for Department projects.

The Department reserves the right to randomly sample and evaluate qualified materials for conformance with this Specification and to perform random audits of documentation. Department representatives may sample material from the manufacturing plant, the project site, and the warehouse.

7210.4. Material Requirements. Provide the following for composite material post and blocks material compliance:

- documentation, in the form of an acceptance letter from the Federal Highway Administration, stating that the material meets the requirements of the National Cooperative Highway Research Program (NCHRP) Report 350 Test Level 3 (TL-3) design speed category; and
- certification from the producer or supplier stating the material composition. Provide material containing a minimum of 60% recycled material comprised of any combination of recycled polyethylene, polypropylene, polyvinyl chloride, tire cord, and/or rubber (natural or styrene butadiene rubber); and
- certification from the producer or supplier stating that the material is thermal and process stabilized to prevent ultra-violet degradation.

7210.5. Dimensions.

A. Blocks. Fabricate composite material to the following dimensions:

- A 6 × 8-in. cross-section ± 1/4 in., less any routing, notching, or finishing (proposed variations in the 6-in. width dimension will be reviewed and may be approved on a case by case basis);
- The plan length ± 1/4 in.; and
- With bolt holes positioned within 1/4 in. in any direction from the plan location.
B. Posts. Fabricate composite material to the following dimensions:

- A 6 × 8-in. cross-section ± 1/4 in. for rectangular posts;
- A 7-in. diameter + 1 in., −0 in. for round posts;
- The plan length ± 1 in.; and
- With bolt holes positioned within 1/4 in. in any direction from the plan location.

7210.6. Qualification Procedures. CST/M&P must qualify composite material posts and blocks before Department use. Submit a request for qualification to the Texas Department of Transportation, Construction Division, Materials and Pavements Section (CP 51), 125 East 11th Street, Austin, TX 78701-2483, and include the following:

- company name,
- physical and mailing addresses, and
- contact person and telephone number.

After submitting the written request, ship for evaluation a minimum of one sample per type of post and block to the Texas Department of Transportation, Construction Division, Materials and Pavements Section (CP 51), 9500 North Lake Creek Parkway, Austin, TX 78717.

Include the following:

- all the documentation and certifications described in Article 7210.4 for each type of post and block and
- a drawing detailing the basic dimensions for each type of post and block.

CST/M&P will place all material deemed acceptable from sample evaluations and documentation review on the MPL.

Report any changes in producer name, type, dimensions, or material composition to the address shown in the first paragraph of this Article. Changes deemed significant may require resubmission for qualification.

7210.7. Disqualification. The Department may disqualify and remove materials from the MPL if one of the following occurs:

- material fails to meet the requirements of this Specification or
- producer or supplier fails to report any changes stated in the last paragraph of Article 7210.6.

Materials removed from the MPL are not allowed on Department projects until successfully qualified again. Serious or deliberate infraction may result in permanent disqualification.

7210.8. Archived Versions. Archived versions are available.