

sion shall be 1600 pounds per square inch. The maximum water absorption allowed over the theoretical lifetime of the block shall not exceed 5 percent by weight, when tested in accordance with ASTM D1037. Block attachment shall be in accordance with the Standard Drawings for wooden posts, standard GR-2, 2A W-Beam guardrail. The size tolerance in the direction of the bolt hole shall not be more than 1/4-inch. The blocks shall present a neat appearance and have plane surfaces. The blocks shall conform to the dimensions and tolerances listed on the Standard Drawings.

The manufacturer of the recycled plastic blocks must provide independent test results showing the material meets the velocity, acceleration and post-impact trajectory requirements of National Cooperative Highway Research Program (NCHRP) Report 350.

The manufacturer shall also certify that the material components of the completed blocks are resistant to the Subterranean Termites during its theoretical lifetime when tested in accordance with ASTM D3345. The theoretical lifetime is considered to be at least 20 years.

SECTION 222—MASONRY UNITS

222.01—Description.

These specifications cover masonry units manufactured of regular or lightweight concrete or brick made from clay or shale in a plant specifically designed for such a purpose.

222.02—Detail Requirements.

(a) Wall Units:

1. **Hollow load bearing units** shall conform to the requirements of ASTM C90, Grade N-I.
2. **Hollow non-load bearing units** shall conform to the requirements of ASTM C129, Type I.
3. **Solid load bearing units** shall conform to the requirements of ASTM C145, Grade N-I.
4. **Building bricks** shall conform to the requirements of AASHTO M114, Grade SW, or ASTM C55, Grade N-I.

(b) **Catch Basins and Manholes:**

1. **Masonry blocks** shall conform to the requirements of ASTM C139.
2. **Bricks** shall conform to the requirements of AASHTO M91, Grade MS, or ASTM C55, Grade N-I.

(c) **Sewer Brick:** Sewer brick shall conform to the requirements of AASHTO M91, Grade SM.**SECTION 223—STEEL REINFORCEMENT****223.01—Description.**

These specifications cover steel items designed to give added flexural strength to hydraulic cement concrete or to control and reduce cracking.

223.02—Detail Requirements.(a) **Reinforcement:**

1. **Deformed bars** shall conform to the requirements of ASTM A615, Grade 40 or 60.
2. **Plain bars** shall conform to the requirements of ASTM A615, Grade 40 or 60, deformation waived. When used as a dowel, material may be a plain bar, Grade 40 or 60 (ASTM A615), or a plain dowel (ASTM A709 Grade 36).
3. **Welded wire fabric** shall conform to the requirements of ASTM A185. When used in continuously reinforced pavement, wire fabric shall be deformed and furnished in flat sheets and shall conform to the requirements of ASTM A497 (high yield of 70,000 pounds per square inch).
4. **Longitudinal bars** for continuous reinforced concrete pavement shall conform to the requirements of ASTM A615, Grade 60.
5. **Structural steel** shall conform to the requirements of Section 226.
6. **Bar mats** shall conform to the requirements of ASTM A184.