**Square Post Specifications:**

**05/09/2012**

1. All Material must be designated as “Crashworthy” as defined by NCHRP Report 350 category 2, level 3 and have a Federal Acceptance Letter as verification.

2. The cross section of the post shall be square tubing formed of 12 gauge (.105” U.S.S. Gauge) or 14 gauge(.083” U.S.S. Gauge) steel, carefully formed into size and, if necessary, shall be welded in such a manner that the weld or flash shall not interfere with the telescoping.

3. Perforated steel posts, anchors, and sleeves shall conform to the standard for hot rolled carbon steel, structural quality, ASTM A1011, SS, Grade 50. The average minimum yield strength after cold-forming shall be 60,000 PSI.

4. Steel posts, anchors, and sleeves shall be manufactured from hot-dipped galvanized steel conforming to

ASTM A653, G90, Structural Quality, Grade 50, Class 1. The weld shall be hot zinc coated after the

scarfing operation.

5. The steel shall be coated with a chromate conversion coating and a clear organic polymer topcoat. Both the interior and exterior of the posts shall be galvanized.

6. The cross section of the post shall be square tube formed and carefully rolled to size and shall be welded by high frequency resistance welding and externally scarfed to agree with corner radii and dimensional tolerances.

7. 7/16” holes on posts and anchors shall be on 1” centers on all four sides the length of the post or anchor. Holes shall be on the centerline of each side in true alignment and opposite each other directly and diagonally. Holes shall be spaced so that when telescoping the section together the holes will line-up on all four sides.

8. The length of each post, anchor, and sleeve shall have a permissible length tolerance of ± ¼”. The thickness shall have a permissible tolerance of ± 1/100”.

9. The finished posts, anchors, and sleeves shall be straight and have a smooth, uniform finish. It shall be possible to telescope all consecutive sizes of square tube freely and for not less than 10’ of their length without the necessity of matching any particular face to any other face.

10. All holes and ends shall be free from burrs and ends shall be cut square. It shall be possible to telescope all consecutive sizes of square posts freely for not less than 10’ of their length without the necessity of matching any particular face to any other face.

11. Shipping: All loads must be on flatbed trucks only. Loads must be tarped.