# TECHNICAL SPECIFICATIONS FOR HILFIKER'S Spiralnail-Wiretruss Wall System

### 1.0 DESCRIPTION

This work shall consist of Hilfiker Spiralnail constructed in accordance with these specifications and the lines, grades, design and dimensions shown on the plans or established by the Owner's Engineer.

### 2.0 MATERIALS

The Contractor shall make his/her own arrangements to purchase all **Spiralnail** materials, including wire mesh reinforcement mats, facing mats, and all necessary incidentals from Hilfiker Retaining Walls, 1902 Hilfiker Lane, Eureka, CA 95503-5711, Telephone 707-443-5093; www.hilfiker.com; info@hilfiker.com.

### 2.1 Spiralnail

Spiralnails shall be formed with a 90-degree twist at every foot. The Spiralnail shall be made from 2" schedule 80 pipe, Grade B (minimum tensile stress 60 ksi, minimum yield stress 35 ksi), conforming to the minimum requirements of ASTM A-53; or 2" tubing, Grade B with an average wall thickness of 0.218" (minimum tensile strength of 58 ksi, minimum yield strength of 46 ksi), conforming to the minimum requirements of ASTM A 500-03a.

ASTM A53

ASTM A500-03a

<u>Description</u>	<u>Requirement</u>
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2" Schedule 80 Pipe
2" tubing, Grade B (average wall thickness of 0.218")

### 2.2 Facing Mats

Wire mesh for facing shall be formed by a series of 60-degree bends. The reinforcing mesh shall be shop fabricated of cold drawn steel wire and shall be welded into the finished mesh fabric conforming to the minimum requirements of ASTM A-1064 (AASHTO M-32 & M-55). Fabric for the **Spiralnail Wall System** shall be as per project specifications, and will conform to only one of the following coating treatments: (**A**) brite basic (non-galvanized), or (**B**) hot dip galvanized (2.0 oz./SF, ASTM A-123 [AASHTO M-111]; 605 g/m²). Any damage done to the mesh galvanization prior to installation shall be repaired in an acceptable manner and in a galvanized coating comparable to that provided. Hardware cloth shall meet the minimum requirements of ASTM A-740.

<u>Description</u>	<u>Requirement</u>
Welded Wire Fabric	ASTM A1064
Hardware Cloth	ASTM A740

### 2.3 Truss Facing

Where required, as shown in the plans, the truss backing shall be formed from 4" channel meeting ASTM A-36 and welded wire mesh meeting ASTM A-1064.

<u>Description</u>	<u>Requirement</u>

 4" 5.4 lb. Channel
 ASTM A36

 ½" Spiral Binders – W5 wire, 6" pitch
 ASTM A1064 / A641 (galv)

# 3.0 ROCK (when Hardware Cloth is not used)

Rock for filling the truss system shall be as listed:

• 100% passing 6 inches, 0-5% passing 4 inches

• End of Section •

This information is proprietary to Hilfiker Retaining Walls, 1902 Hilfiker Lane, Eureka, CA 95503-5711, Telephone: 707-443-5093, Email: <u>info@hilfiker.com</u>.

## HILFIKER RETAINING WALLS ARE COVERED BY ONE OR MORE PATENTS.

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