GENERAL NOTES

1. INTRODUCTION - All details and information given within this document are generalized standards for light to moderate loading conditions. Any reinforcement or hardware which is specifically quantified in the details should be considered a minimum amount and should be properly sized during the design process. Code revisions subsequent to those referenced on page 3 may supersede the information in this document.

2. BEARING - The minimum distance from the face of the support to the end of the double tee in the direction of the span should be \( l/180 \), where \( l \) is the clear span, but not less than 3". The bearing length detailed on the drawing should be established by the engineer of record with due consideration of standard fabrication and erection tolerances. For normal span ranges, a dimension of 6" is customary and is used in the details that follow. CTC recommends the use of minimum ½" thick neoprene bearing pads to provide uniform bearing. Bearing pads should be held back a minimum of ½" from any unarmored edges, or at least the chamfer dimension at chamfered edges.

BEARING LENGTH

3. TOP FINISH - The standard top surface finish of a double tee flange that will receive a composite topping is a transverse rake, which is normally adequate for horizontal shear transfer.

4. TOPPING - Cast-in-place topping over double tees is useful for diaphragm action and as a means of leveling the finished surface. The typical 28-day design strength for a cast-in-place concrete topping is 4,000 psi.

5. PENETRATIONS - CTC recommends that all penetrations in the flange less than 6" in diameter for mechanical, plumbing, electrical, etc. be field installed by the trades involved. Penetrations 6" in diameter or greater should be installed during double tee fabrication. Penetrations through the double tee web should be avoided, but if required should be installed during fabrication to avoid damaging prestressing strand.

6. DIAPHRAGM DESIGN AND STRUCTURAL INTEGRITY - For detailed information on designing and developing structural integrity within a system, the reader should refer to the PCI Design Handbook sections 4.3 and 4.8. (See Reference 3)

7. ADDITIONAL INFORMATION - For additional information concerning double tees, see Concrete Technology Corporation’s “10 Foot Wide Double Tee Design Criteria & Span-Load Tables.”