1. Refer to the following specifications for firestopping:
   a. 07 84 00 Firestopping
   b. 07 84 13 Penetration Firestopping
   c. 22 00 00 Plumbing
   d. 23 00 00 HVAC
   e. 26 00 00 Electrical
   f. 27 06 37 Communication

   For Quality Control requirements, refer to the Quality Control portion of the specification.

2. Details shown are typical details, containing general information only. Always refer to the full UL system detaile for complete system requirements. If field conditions do not match requirements of details, approved alternate details shall be utilized. Design requirements, field conditions and dimensions need to be verified to compliance with the details, including but not limited to the following:
   * Fire Rating (F-Rating)
   * Temperature Rating (T-Rating)
   * Leakage Rating (L-Rating)
   * Water Rating (W-Rating)
   * Annular Space
   * Percent Fill
   * Movement
   * Type and thickness of fire-rated construction.

3. If alternate details matching the field conditions are not available, manufacturer's engineering judgment drawings are acceptable. Contact Hilti Inc. for alternative systems or Engineering Judgment (EJ) drawings shall follow the International Firestop Council (IFC) Guidelines for Evaluating Firestop System Engineering Judgments.

4. References:
   - 2013 Underwriter’s Laboratories Fire Resistance Directory, Volumes 1 & 2
   - NFPA 70 - National Electric Code
   - All governing local and regional building codes

5. Firestop System installation must meet requirements of ASTM E-814 (UL 1479) tested assemblies that provide a fire rating equal to that of the construction being penetrated.

6. All rated through-penetration assemblies shall be prominently labeled with a Hilti Firestop Label equipped with a QR code with the following information:
   * Warning! - Do Not Disturb
   * Through Penetration Firestop System
   * UL System # * Product(s) used
   * Hourly Rating (F-Rating)
   * Installation Date

7. For outlet boxes requiring protection, use only Wall Opening Protective Materials, category CLIV as classified by Underwriter’s Laboratories, Fire Resistance Directory (Volume 1.)