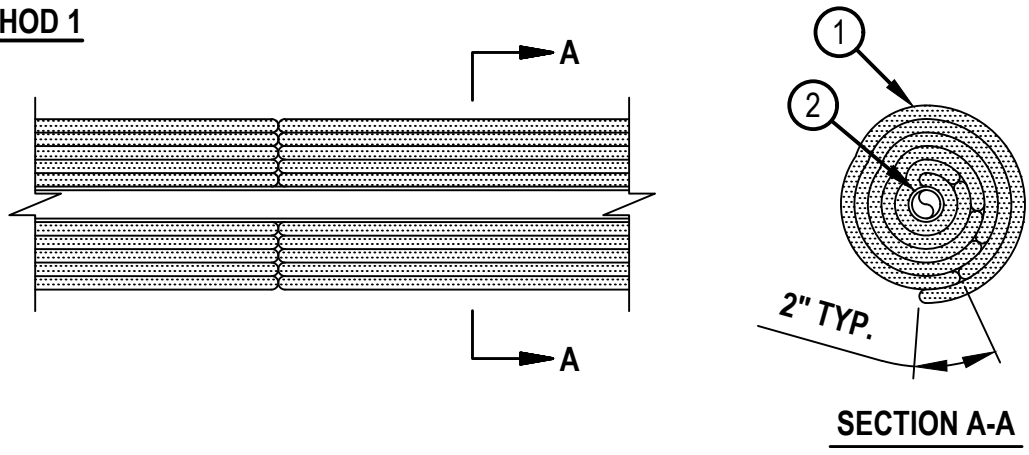
Hilti Corporation
Design Number HI/AF 60-01
Applied Fireproofing
Hilti CFP-ES Endo-Shield
IEEE 848
Rating : Ampacity Derating Factor (ADF) - See Table 1.
Reference Intertek Design Listing HI/AF 120-01 for Fire Resistance Ratings

Table 1

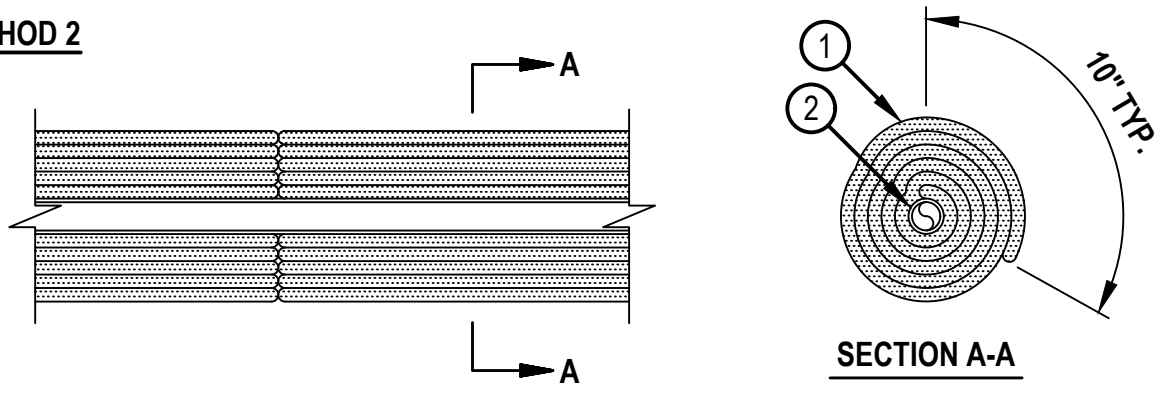
CONDUIT SIZE	NUMBER OF LAYERS OF CFP-ES ENDO-SHIELD	AMPACITY DERATING FACTOR (ADF)
1 IN. CONDUIT	4	25.75%
	5	26.09%
4 IN. CONDUIT	4	28.01%
	5	31.92%

METHOD 1



SECTION A-A

METHOD 2



SECTION A-A

Figure 1. Example of 1 in. Conduit, 5 Layers of Hilti Endo-Shield Specifications

Hilti Corporation
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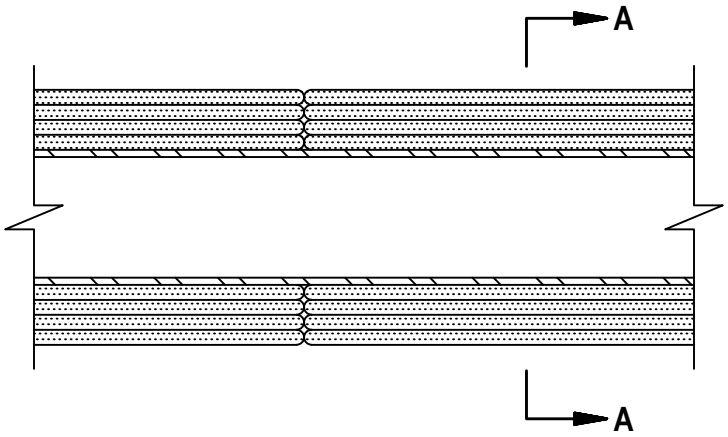
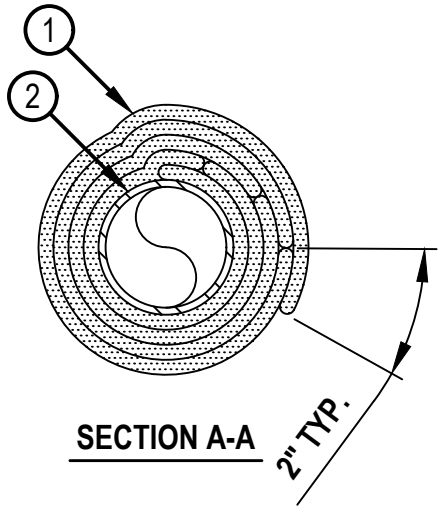
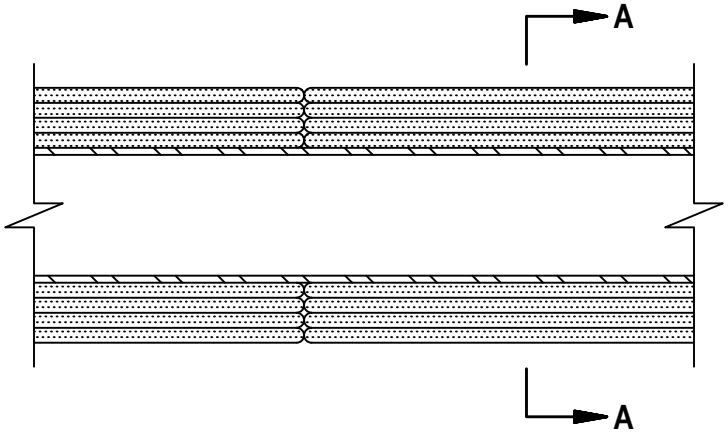
METHOD 1

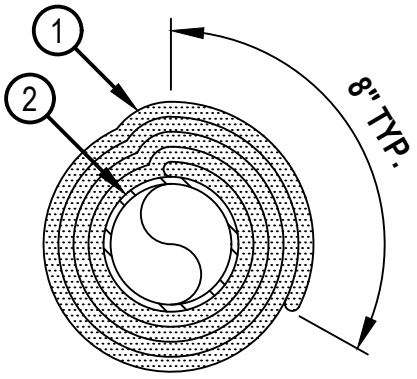




SECTION A-A

METHOD 2





SECTION A-A

Figure 2. Example of 4 in. Conduit, 4 Layers of Hilti Endo-Shield Specifications

Hilti Corporation
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Applied Fireproofing
Hilti CFP-ES Endo-Shield
IEEE 848
Rating : Ampacity Derating Factor (ADF) - See Table 1.
Reference Intertek Design Listing HI/AF 120-01 for Fire Resistance Ratings

1. ENDOTHERMIC MAT :

CERTIFIED PRODUCT : Hilti Corporation, Applied Fireproofing, Hilti CFP-ES Endo-Shield.

METHOD 1 - INDIVIDUALLY WRAPPED

LAYER 1 - Using 3 in. wide filament tape, aluminum foil tape, or FSK tape, attach leading edge of Hilti Endo-Shield onto the conduit (Item 2). Wrap Hilti Endo-Shield tightly around the conduit and overlapping 2 in. at the longitudinal seam. For the longitudinal seam, apply 3 in. wide aluminum foil tape or FSK tape centered for the full length of the seam.

LAYER 2, 3, 4, AND 5 - Wrap a second, third, and fourth layer of Hilti Endo-Shield in the same manner as Layer 1. As required, wrap a fifth layer of Hilti Endo-Shield in the same manner as Layer 1. The start of layer begins at the longitudinal seam of previous layer, secured with 3 in. wide aluminum foil tape or FSK tape covering the full length of the seam.

The radial seams are butted end-to-end without an overlap. Once layer wrapping is completed, apply 3 in. wide aluminum foil tape or FSK tape centered over the radial seam and overlap 2 in. back onto itself.

METHOD 2 - CONTINUOUSLY WRAPPED

Hilti Endo-Shield may be continuously wrapped around the conduit (Item 2). Using min. 3 in. wide filament tape, aluminum foil tape, or FSK tape, attach leading edge of Hilti Endo-Shield onto the conduit and wrap continuously. A 2 in. overlap of longitudinal seam shall be included for each layer required. For example, a 4-layer system requires an 8 in. overlap on final layer. Apply 3 in. wide aluminum foil tape or FSK tape over the full length of the longitudinal seam.

The radial seams are butted end-to-end without an overlap. Once layer wrapping is completed, apply 3 in. wide aluminum foil tape or FSK tape centered over the radial seam and overlap 2 in. back onto itself.

2. CONDUIT : Min. nominal 1 in. diameter and max. 4 in. diameter rigid galvanized steel conduit.