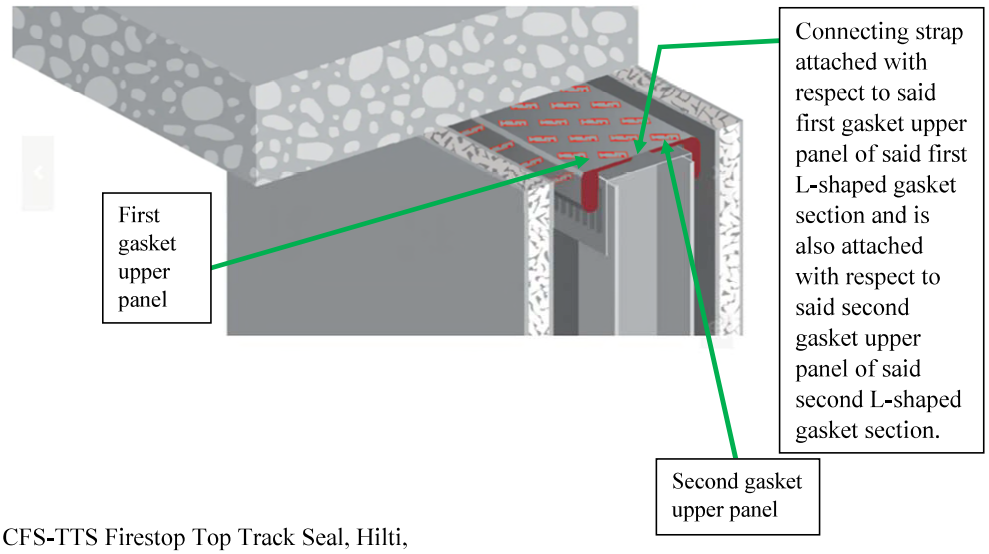
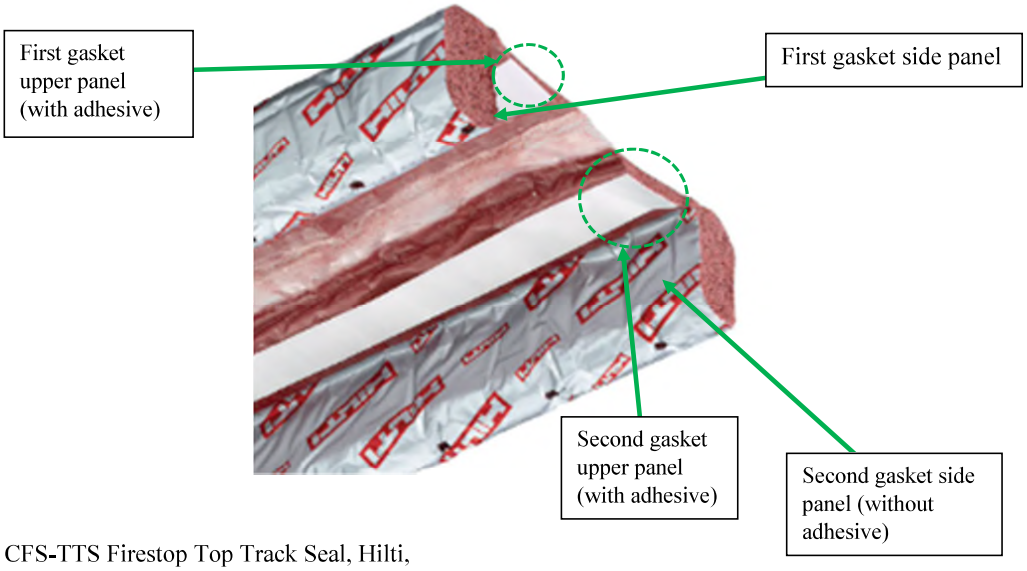
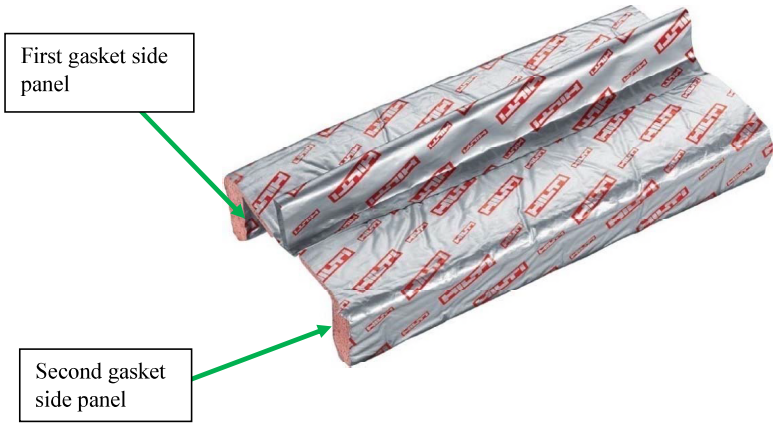
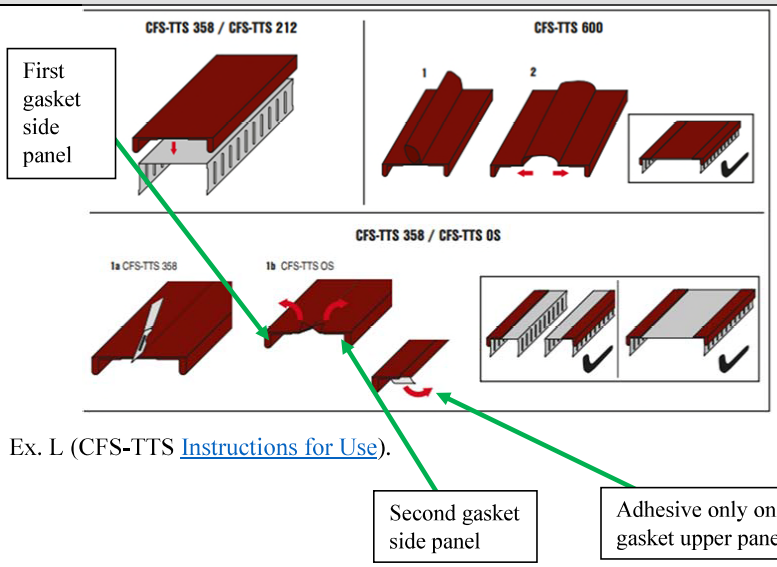
Claim 7 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
	 CFS-TTS Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r5044710#nav%2Fclose.

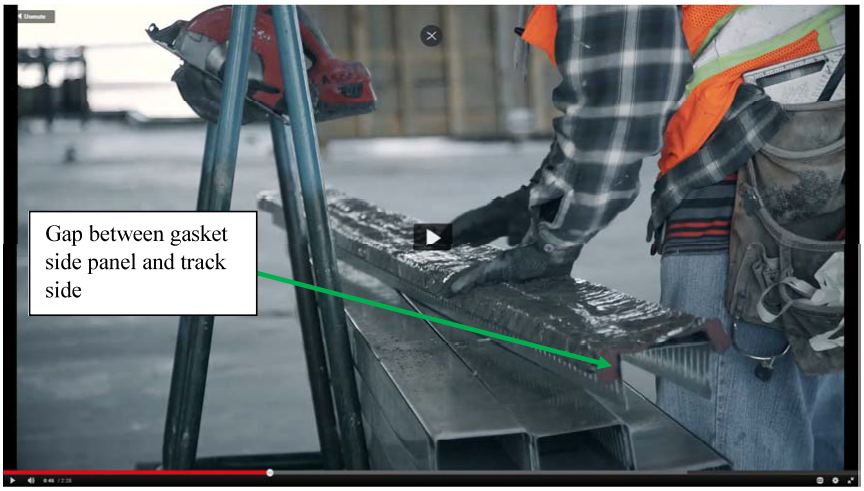
3. Hilti's CFS-TTS Firestop Top Track Seal infringes claim 8 of the '232 Patent.

Claim 8 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said first gasket side panel is spatially disposed from the first track side section to be moveable with respect thereto responsive to relative movement between the wall configuration and the upper building structure thereabove and wherein said second gasket side panel is spatially disposed from the second track side section to be moveable with respect thereto responsive to relative movement between the wall configuration and the upper building structure thereabove.	The Firestop Top Track Seal does not have any direct attachment between the first and second gasket side panels and the first and second track side sections, respectively. For example, the first and second gasket side panels do not have any adhesive or any other structure to connect them directly to the first and second track side sections. Nor do the first and second track side sections include any adhesive or any other structure to connect them directly to the first and second gasket side panels. As explained in the specification of the '232 Patent, this lack of direct attachment permits the side panels of the accused products to be spatially disposed from the track and permits the side sections to be moveable with respect to the track side sections responsive to relative movement between the wall configuration and the upper building structure thereabove. See '232 Patent, 8:52-9:12 ("This absence of any direct attachment between first track side section 20 and first gasket side panel 71 as well as the lack of direct attachment between the second track side section 22 and the second gasket side panel 77 allows this freedom of movement to respond to relative structural movement while still maintaining the gasket side panels 71 and 77 at positions adjacent the respective track side section 20 and 22 while maintaining positioning of the gasket side panels 71 and 77 extending generally thereover to facilitate insulation thereadjacent."). Furthermore, nothing in Hilti's Operating Instructions or product videos on its website suggests that that there is any connection between the first and second gasket side panels and first and second track side sections that prevents the first and second track side sections from being moveable with respect to the first and second gasket side panels. Accordingly, Hilti's CFS-TTS Firestop Top Track Seal includes a "first gasket side panel…spatially disposed from the first track side section to be moveable with respect thereto responsive to relative movement between the wall configuration and the upper building structure thereabove" and a "second gasket side panel…spatially disposed from the second track side section to be moveable with respect thereto responsive to relative movement between the wall configuration and the upper building structure thereabove."

Claim 8 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
	 CFS-TTS Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r5044710#nav%2Fclose.

Claim 8 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
	 CFS-TTS Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r5044710#nav%2Fclose.

Claim 8 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
	 Ex. L (CFS-TTS Instructions for Use).

Claim 8 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
	Additionally, Hilti's product videos show gaps between the track and the first and second gasket side panels during installation further evidencing that they are spatially disposed:  CFS-TTS Promo (16:9, EN), Hilti at 0:46, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r5044710#nav%2Fclose.

Claim 8 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
	 CFS-TTS Promo (16:9, EN), Hilti at 0:56, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r5044710#nav%2Fclose.

4. Hilti's CFS-TTS Firestop Top Track Seal infringes claim 9 of the '232 Patent.

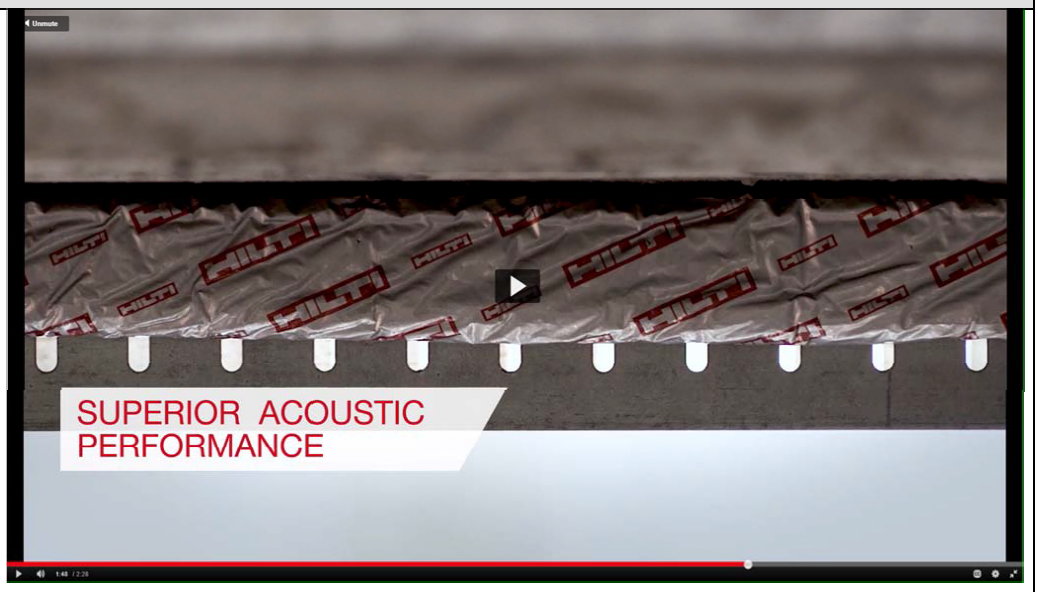
Claim 9 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said first gasket upper panel and said first gasket side panel are made from an insulating material which includes a firestopping insulating component therewithin.	Hilti's website for the Firestop Top Track Seal describes the product as a "Firestop Preformed solution for top-of-wall drywall joints." CFS-TTS Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r5044710#nav%2Fclose. Hilti's Product Information Sheet for the Firestop Top Track Seal describes applications for use of the product as "Firestop, smoke and sound seal for head-of-wall joints between top track and gypsum to flat concrete slabs." Ex. K (CFS-TTS Product Information Sheet). Furthermore, the Firestop Top Track Seal is constructed from polyurethane foam, which is an insulating material. Ex. K (CFS-TTS Product Information Sheet). The polyurethane foam is impregnated with a firestopping material.

5. Hilti's CFS-TTS Firestop Top Track Seal infringes claim 10 of the '232 Patent.

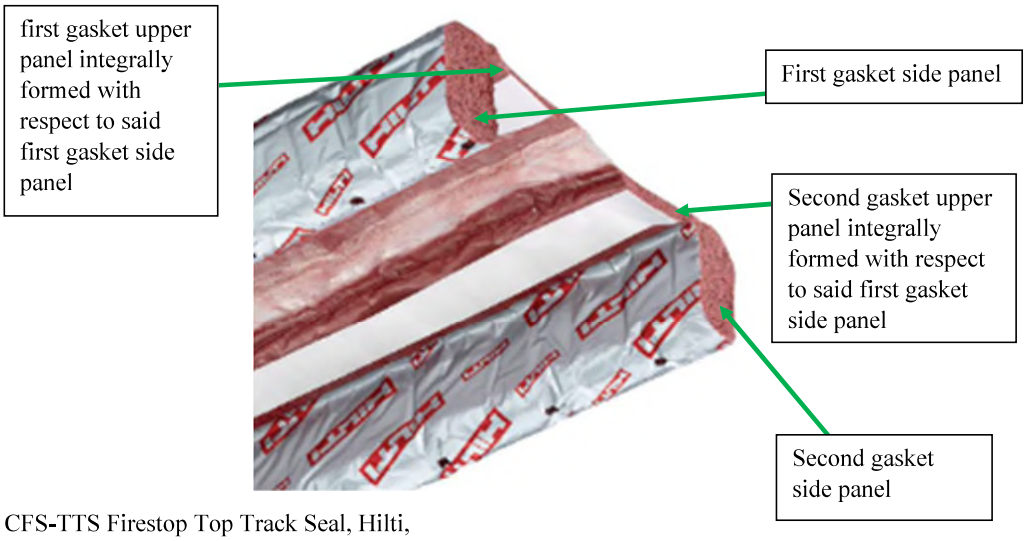
Claim 10 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 9 wherein the firestopping insulating component is intumescent.	Hilti's Product Information Sheet for the Firestop Top Track Seal describes applications for use of the product as "Firestop, smoke and sound seal for head-of-wall joints between top track and gypsum to flat concrete slabs." Ex. K (CFS-TTS Product Information Sheet). Furthermore, the Firestop Top Track Seal is constructed from polyurethane foam, which is an insulating material. Ex. K (CFS-TTS Product Information Sheet). The polyurethane foam is impregnated with an intumescent firestopping material.

6. Hilti's CFS-TTS Firestop Top Track Seal infringes claim 11 of the '232 Patent.

Claim 11 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said first gasket upper panel and said first gasket side panel are made from an insulating material which includes an acoustical insulating component therewithin.	Hilti's website for the Firestop Top Track Seal describes the product as a "Firestop Preformed solution for top-of-wall drywall joints." CFS-TTS Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r5044710#nav%2Fclose. Hilti's Product Information Sheet for the Firestop Top Track Seal describes applications for use of the product as "Firestop, smoke and sound seal for head-of-wall joints between top track and gypsum to flat concrete slabs." Ex. K (CFS-TTS Product Information Sheet). Furthermore, the Firestop Top Track Seal is constructed from polyurethane foam, which is an insulating material. Ex. K (CFS-TTS Product Information Sheet). Therefore, because it is a "sound seal" constructed from an insulating material, the CFS-TTS includes an acoustical insulating component. Additionally, Hilti's product video touts the acoustic insulating properties of the CFS-TTS:

Claim 11 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
	 CFS-TTS Promo (16:9, EN), Hilti at 1:48, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r5044710#nav%2Fclose ("This product also keeps sound from transferring over.").

7. Hilti's CFS-TTS Firestop Top Track Seal infringes claim 12 of the '232 Patent.

Claim 12 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said first gasket upper panel is integrally formed with respect to said first gasket side panel and wherein said second gasket upper panel is integrally formed with respect to said second gasket side panel.	The Firestop Top Track Seal CFS-TTS includes a first gasket upper panel that is integrally formed with respect to a first gasket side panel and a second gasket upper panel that is integrally formed with respect to a second gasket side panel. Specifically, as is illustrated by the cross-section edges in the images below, the first gasket upper panel and first gasket side panels are all made from one continuous piece of the same material, making them integrally formed. The same is true for the second gasket upper panel and second gasket side panel:  CFS-TTS Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r5044710#nav%2Fclose.

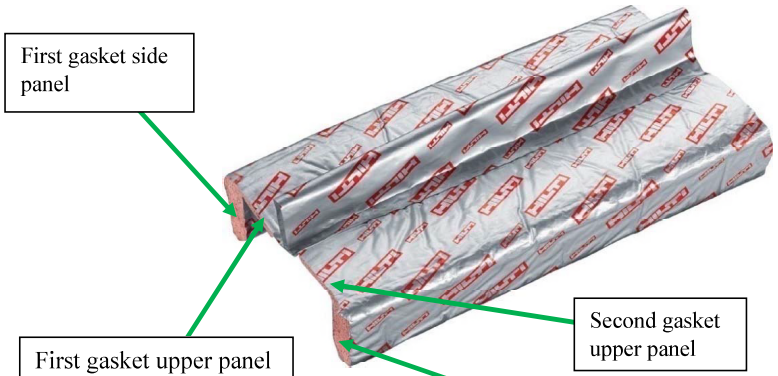
Claim 12 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
	 CFS-TTS Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r5044710#nav%2Fclose.

EXHIBIT I

EXHIBIT I

Claim Charts Demonstrating Hilti's Infringement of Claims 6-12 of Specified Technology Inc.'s U.S. Patent No. 9,157,232 (the "'232 Patent") by the Firestop Top Track Seal CFS-TTS MD

Accused Devices: (1) Hilti's Firestop Top Track Seal CFS-TTS MD OS and (2) CFS-TTS MD 600. Both of these accused devices are variations of the Firestop Top Track Seal CFS-TTS MD. Specifically, the Firestop Top Track Seal CFS-TTS MD OS is a seal to fit a 3 5/8" wide track and the Firestop Top Track Seal CFS-TTS 600 is a seal to fit a 6" wide track. *See* Ex. M (CFS-TTS MD Product Information Sheet).

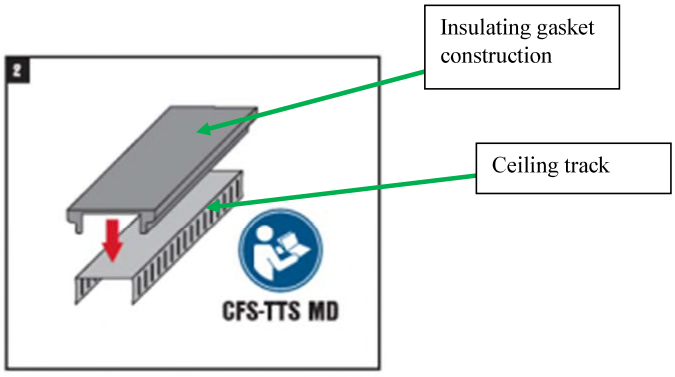
The Firestop Top Track Seal CFS-TTS MD OS is separable down the middle. *See* Ex. M (CFS-TTS MD Product Information Sheet); Ex. L (CFS-TTS MD Operating Instructions). The specific width dimensions of the seals and the capability of being separated are the differences between the two different versions of the Firestop Top Track Seal CFS-TTS MD. These features are not material to the asserted claims of the '232 Patent. That is, none of these differences affect or are pertinent to the infringement assessment herein.

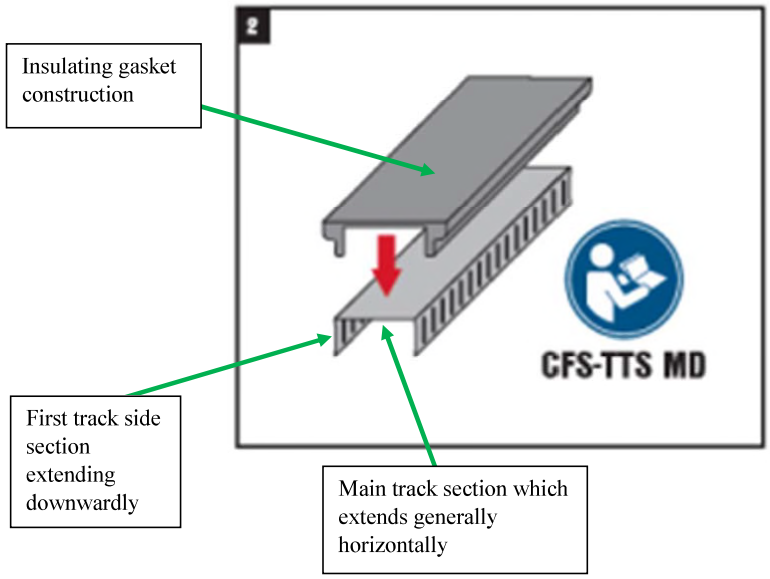
The chart below analyzes infringement of the CFS-TTS Firestop Top Track Seal MD using the images provided on Hilti's website and other literature as an exemplary device, but the infringement allegations apply to both versions of the device.

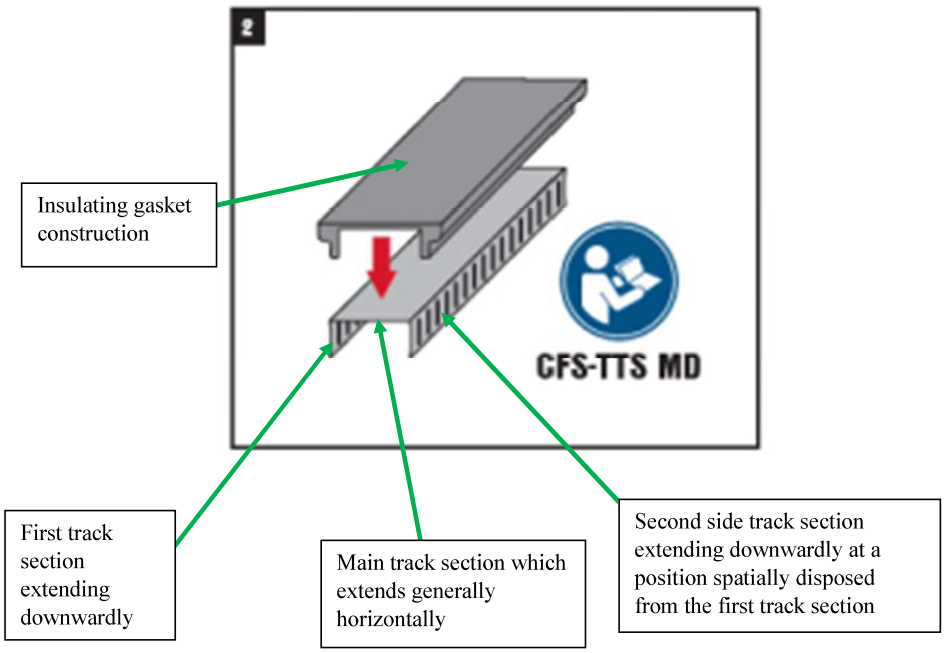
STI reserves the right to rebut any non-infringement arguments set forth by Hilti.

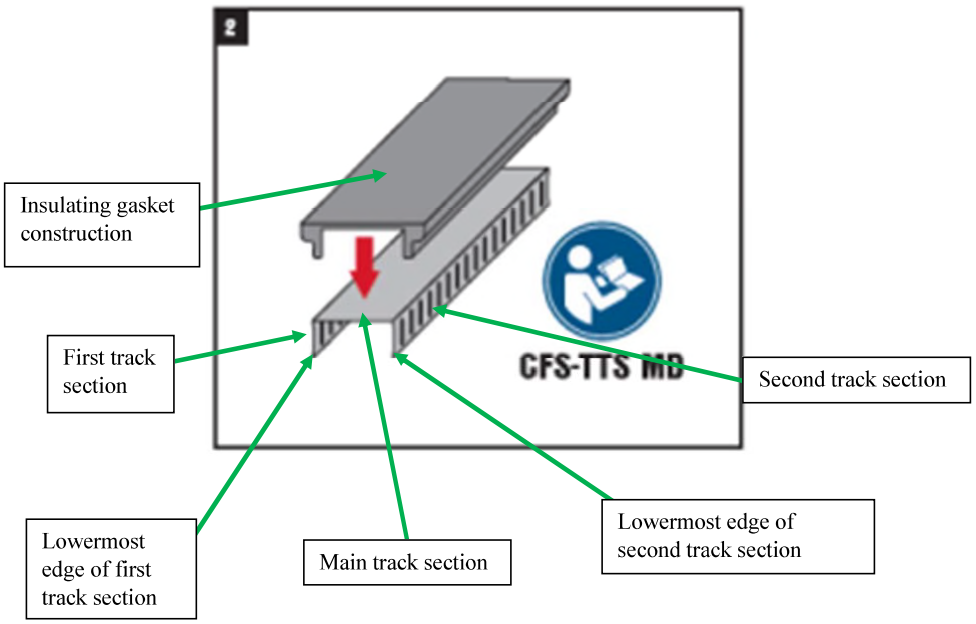
1. Hilti's CFS-TTS MD Firestop Top Track Seal infringes claim 6 of the '232 Patent.

Claim 6 of '232 Patent	Hilti's CFS-TTS MD Firestop Top Track Seal
[P1] An adjustable head-of-wall insulating construction for sealing a head-of-wall area between a ceiling thereabove and a wall configuration therebelow	Hilti's CFS-TTS Firestop Top Track Seal CFS-TTS MD is an adjustable head of wall insulating construction for sealing a head-of-wall area between a ceiling thereabove and a wall configuration therebelow. Hilti's website for the Firestop Top Track Seal CFS-TTS MD describes the product as a "Firestop Preformed solution for top-of-wall drywall joints under metal deck." CFS-TTS MD Firestop Top Track Seal, Hilti,

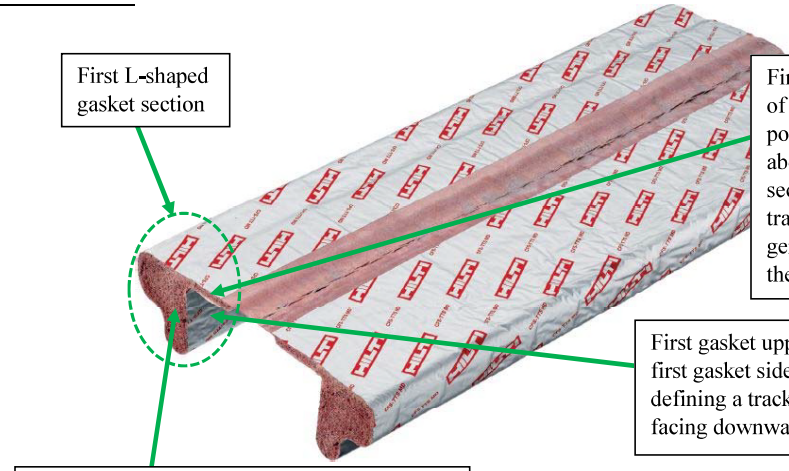
Claim 6 of '232 Patent	Hilti's CFS-TTS MD Firestop Top Track Seal
	https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576. Hilti's Product Information Sheet for the Firestop Top Track Seal CFS-TTS MD describes applications for use of the product as "Firestop, smoke and sound seal for head-of-wall joints between gypsum walls to corrugated metal deck and metal roof decks." Ex. M (CFS-TTS Product Information Sheet).  Hilti's Installation Guide for the Firestop Top Track Seal CFS-TTS MD provides illustrations of the product being installed at the head of a wall. Ex. N (Installation Guide for CFS-TTS MD) (providing various illustrations of the CFS-TTS MD being installed on a ceiling track).

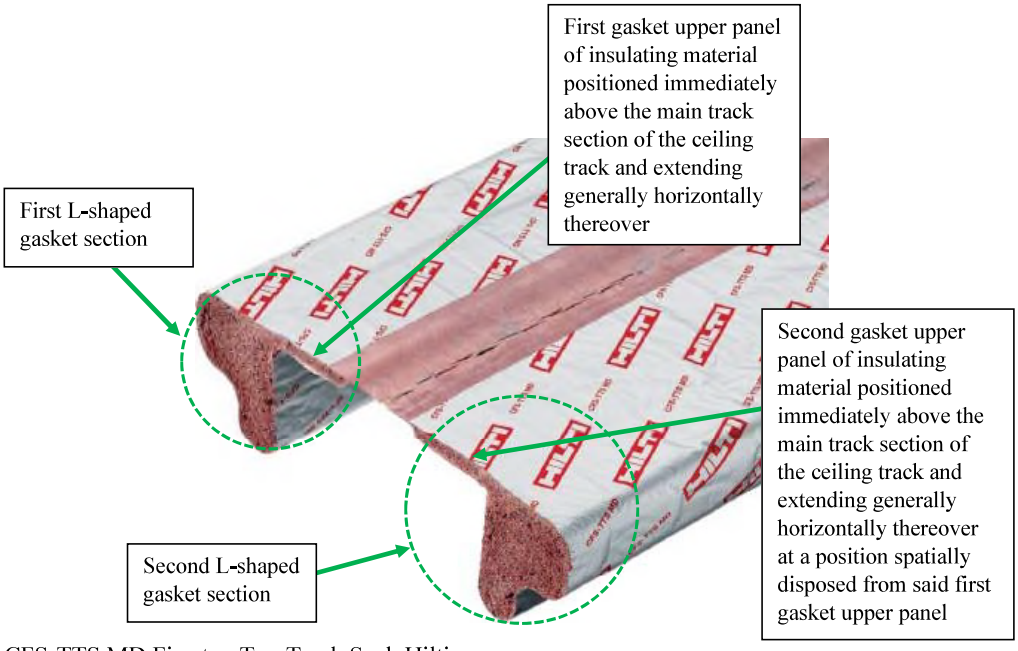
[P2] [a wall configuration] which is wider than standard and which includes a ceiling track having a main track section which extends generally horizontally and a first track side section extending downwardly therefrom and	Hilti's Product Information Sheet for the Firestop Top Track Seal further explains that "CFS-TTS MD OS is a flexible solution for various track sizes." Ex. M (CFS-TTS MD Product Information Sheet). The Firestop Top Track Seal is produced in several different size variants for sealing a head-of-wall area above a wider than standard wall configuration. At least a double stud wall is "wider than standard." *See* '232 Patent Specification, 10:29-34.  Ex. N (Installation Guide for CFS-TTS MD) (providing various illustrations of the CFS-TTS MD being installed on a ceiling track).

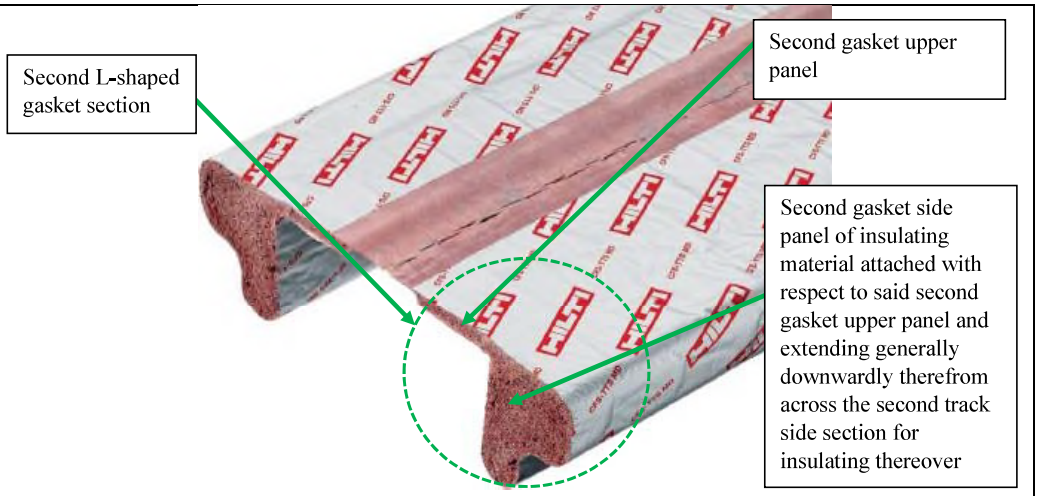
[P3] a second side track section extend downwardly therefrom at a position spatially disposed from the first track section	 Ex. N (Installation Guide for CFS-TTS MD) (providing various illustrations of the CFS-TTS MD being installed on a ceiling track).

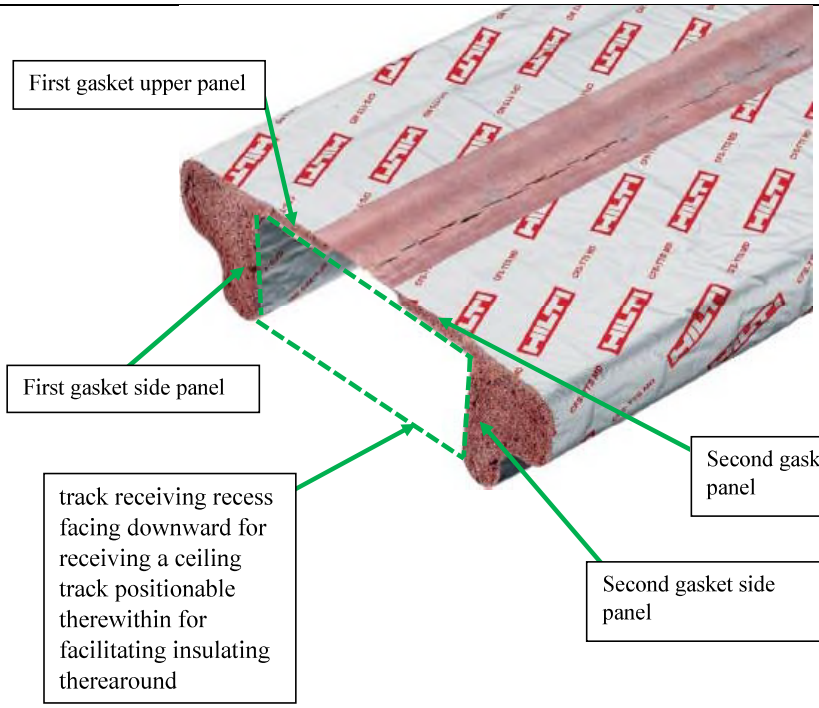
[P4] wherein the main track section includes a first track side section defining a first lowermost edge thereof and a second side track section defining a second lowermost edge thereof, said insulating gasket construction comprising:	 Ex. N (Installation Guide for CFS-TTS MD) (providing various illustrations of the CFS-TTS MD being installed on a ceiling track).

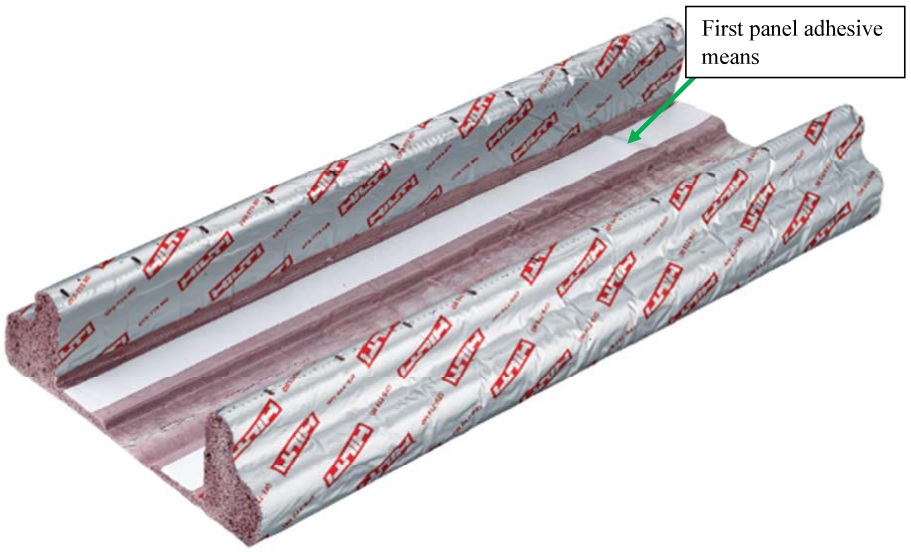
A. a first L-shaped gasket section including: (1) a first gasket upper panel of insulating material positioned immediately above the main track section of the ceiling track and extending generally horizontally thereover; and	 *See also* CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

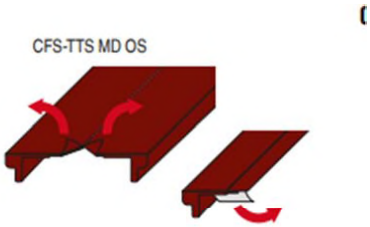
(2) a first gasket side panel of insulating material attached with respect to said first gasket upper panel and extending generally downwardly therefrom across the first track side section for insulating thereover, said first gasket side panel extending downwardly from said first gasket upper panel to define the generally L-shaped configuration of the first L-shaped gasket section, said first gasket upper panel and said first gasket side panel together defining a track receiving recess facing downwardly therebelow;	 *See also* CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

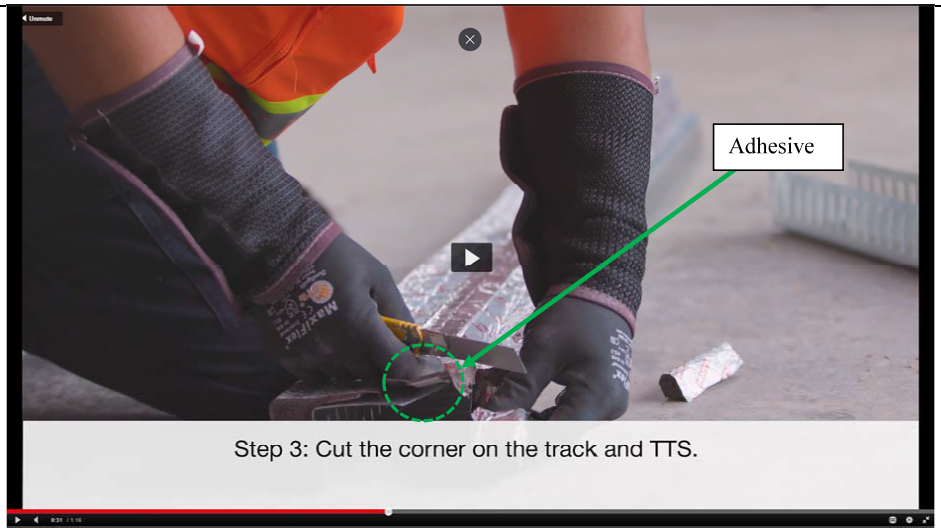
B. a second L-shaped gasket section including: (1) a second gasket upper panel of insulating material positioned immediately above the main track section of the ceiling track and extending generally horizontally thereover at a position spatially disposed from said first gasket upper panel; and	 CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

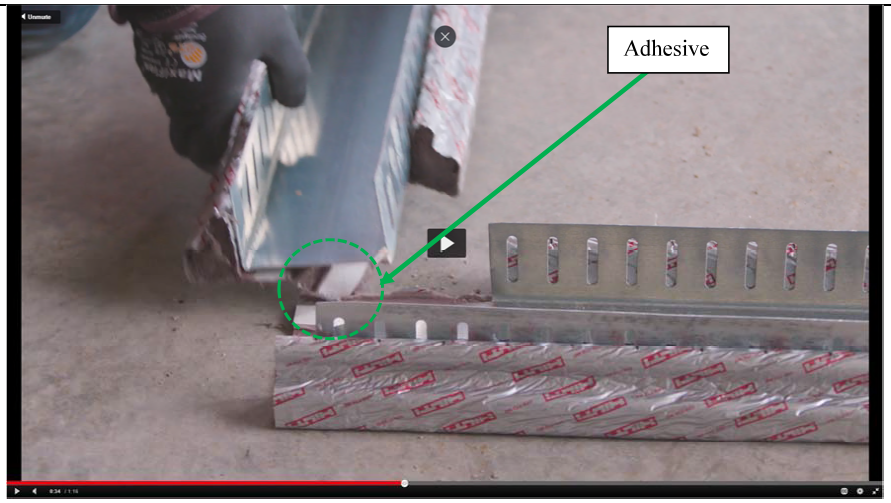
(2) a second gasket side panel of insulating material attached with respect to said second gasket upper panel and extending generally downwardly therefrom across the second track side section for insulating thereover, said second gasket side panel extending downwardly from said second gasket upper panel to define the generally L-shaped configuration of the second L-shaped gasket section,	 In addition, as shown in the photo, the second side gasket panel extends downwardly from the second gasket upper panel to define the generally L-shaped configuration of the second L-shaped gasket section. CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

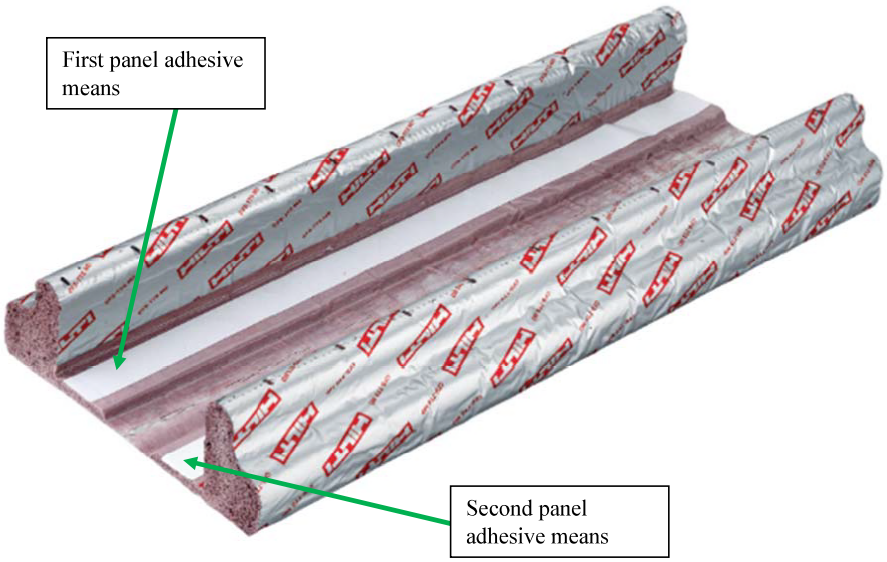
said second gasket upper panel and said second gasket side panel and said first gasket upper panel and said first gasket side panel together defining a track receiving recess facing downward therebelow for receiving a ceiling track positionable therewithin for facilitating insulating therearound;	 CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

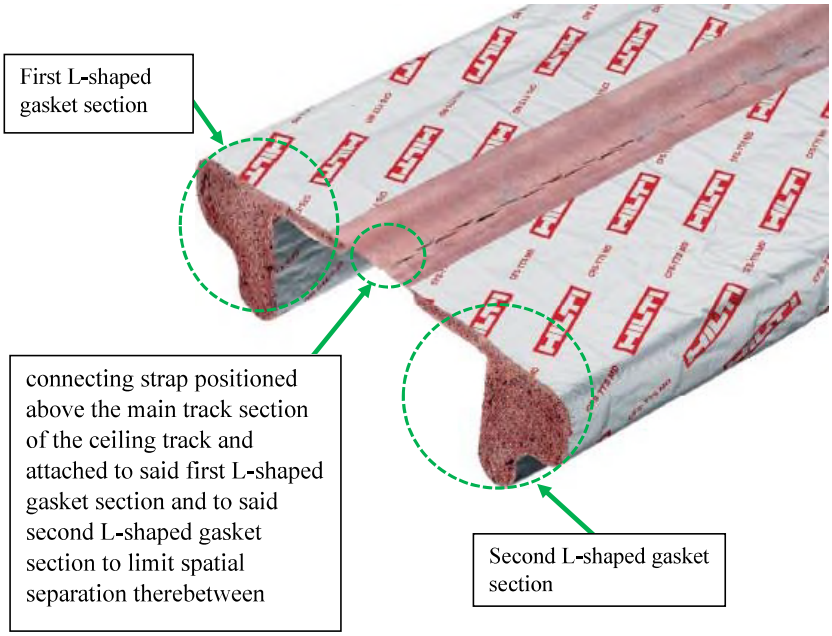
C. a first panel adhesive means mounted on said first gasket upper panel at a position between said first gasket upper panel of said first L-shaped gasket section and the main track section of the ceiling track to facilitate engagement therebetween;	Hilti's website and Product Information Sheet for the Firestop Top Track Seal CFS-TTS MD both provide an image of the product having an adhesive strip on both upper panels. CFS-TTS Firestop CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576; Ex. M (CFS-TTS MD Product Information Sheet).  CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

	Hilti's Instructions for Use of the Firestop Top Track Seal CFS-TTS MD illustrates a white film being removed before installation:  Ex. O (CFS-TTS MD Operating Instructions). Additionally, Hilti's website for the CFS-TTS MD includes videos that show white film of adhesive strips on the seal:

	 CFS-TTS MD How-To (16:0, EN) CFS-TTS MD Top Track Seal for Metal Deck: How to install corner instersections parallel and perpendicular, Hilti at 0:31, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

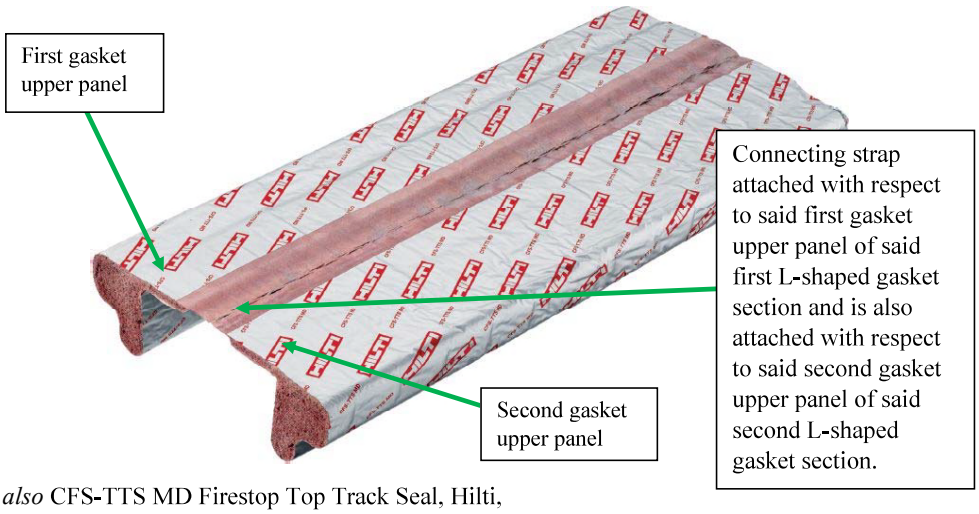
	 CFS-TTS MD How-To (16:0, EN) CFS-TTS MD Top Track Seal for Metal Deck: How to install corner instersections parallel and perpendicular, Hilti at 0:34, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576

D. a second panel adhesive means mounted on said second gasket upper panel at a position between said second gasket upper panel of said second L-shaped gasket section and the main track section of the ceiling track to facilitate engagement therebetween; and	Hilti's website and Product Information Sheet for the Firestop Top Track Seal CFS-TTS MD both provide an image of the product having an adhesive strip on both upper panels. CFS-TTS Firestop CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576; Ex. M (CFS-TTS MD Product Information Sheet).  CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

E. at least one connecting strap positioned above the main track section of the ceiling track and attached to said first L-shaped gasket section and to said second L-shaped gasket section to limit spatial separation therebetween.	The Firestop Top Track Seal has a thin plastic strip that is a connecting strap positioned above the main track section of the ceiling track and attached to the first and second L-shaped gasket sections and limits spatial separation therebetween:  CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

	The CFS-TTS MD Firestop Top Track Seals literally include a connecting strap. In addition, in the alternative, the CFS-TTS MD Firestop Top Track Seals include a connecting strap under of the Doctrine of Equivalents. The center connecting portion of the CFS-TTS MD Firestop Top Track Seals performs substantially the same function in substantially the same way to achieve substantially the same result as the claimed "connecting strap." Specifically, the function of the connecting strap is to connect the first L-shaped gasket section and to the second L-shaped gasket section to limit spatial separation therebetween. The center portion of the CFS-TTS MD Firestop Top Track Seal does precisely this; it connects to the L-shaped gasket sections and limits special separation between the sections.

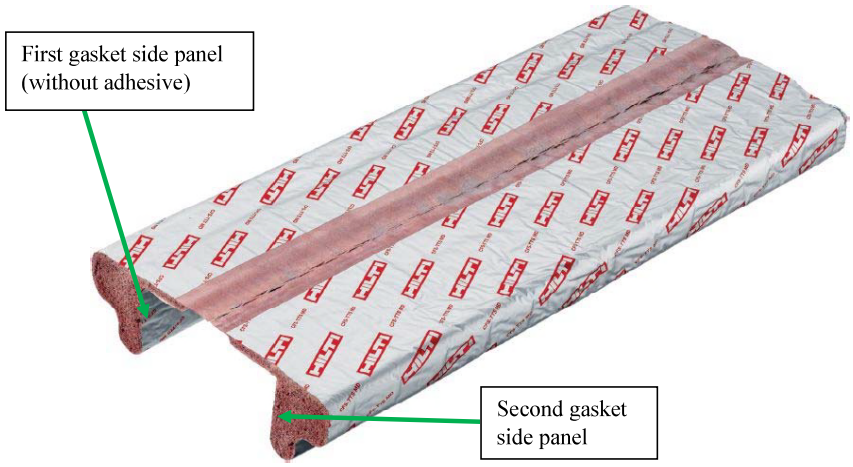
2. Hilti's CFS-TTS MD Firestop Top Track Seal infringes claim 7 of the '232 Patent.

Claim 7 of '232 Patent	Hilti's CFS-TTS MD Firestop Top Track Seal
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said at least one connecting strap is attached with respect to said first gasket upper panel of said first L-shaped gasket section and is also attached with respect to said second gasket upper panel of said second L-shaped gasket section.	The Firestop Top Track Seal CFS-TTS MD has a thin plastic strip that is a connecting strap positioned above the main track section of the ceiling track and attached to both the first and second upper panels of the first and second L-shaped gasket sections:  *See also* CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576. As explained above with respect to claim 6, the CFS-TTS MD literally include a connecting strap. Additionally, and in the alternative, the Doctrine of Equivalents also applies. Specifically, the center connecting portion of the CFS-TTS MD performs substantially the same function in substantially the same way to achieve substantially the same result as the claimed "connecting strap." Specifically, the function of the connecting strap is to connect the first L-shaped gasket section and to the second L-

Claim 7 of '232 Patent	Hilti's CFS-TTS MD Firestop Top Track Seal
	shaped gasket section to limit spatial separation therebetween. The center portion of the CFS-TTS MD does this; it connects to the L-shaped gasket sections and limits special separation between the sections.

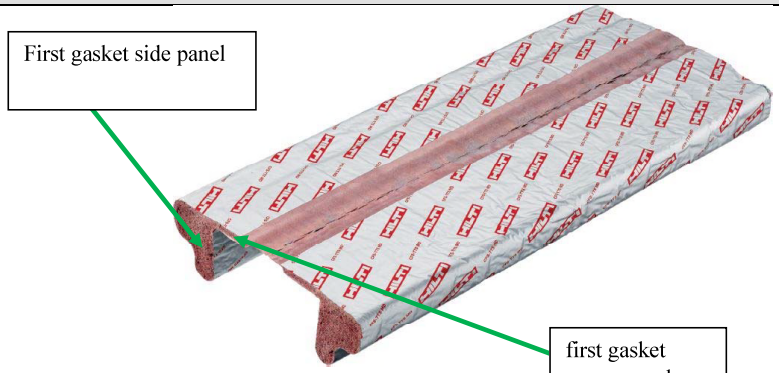
3. Hilti's CFS-TTS MD Firestop Top Track Seal infringes claim 8 of the '232 Patent.

Claim 8 of '232 Patent	Hilti's CFS-TTS MD Firestop Top Track Seal
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said first gasket side panel is spatially disposed from the first track side section to be moveable with respect thereto responsive to relative movement between the wall configuration and the upper building structure thereabove and wherein said second gasket side panel is spatially disposed from the second track side section to be moveable with respect thereto responsive to relative movement between the wall configuration and the upper building structure thereabove.	The CFS-TTS MD Firestop Top Track Seal does not have any direct attachment between the first and second gasket side panels and the first and second track side sections, respectively. For example, the first and second gasket side panels do not have any adhesive or any other structure to connect them directly to the first and second track side sections. Nor do the first and second track side sections include any adhesive or any other structure to connect them directly to the first and second gasket side panels. As explained in the specification of the '232 Patent, this lack of direct attachment permits the side panels to be spatially disposed from the track and permits the side sections to be moveable with respect to the track side sections responsive to relative movement between the wall configuration and the upper building structure thereabove. See '232 Patent, 8:52-9:12 ("This absence of any direct attachment between first track side section 20 and first gasket side panel 71 as well as the lack of direct attachment between the second track side section 22 and the second gasket side panel 77 allows this freedom of movement to respond to relative structural movement while still maintaining the gasket side panels 71 and 77 at positions adjacent the respective track side section 20 and 22 while maintaining positioning of the gasket side panels 71 and 77 extending generally thereover to facilitate insulation thereadjacent."). Furthermore, nothing in Hilti's Operating Instructions or product videos on its website suggests that that there is any connection between the first and second gasket side panels and first and second track side sections that prevents the first and second track side sections from being moveable with respect to the first and second gasket side panels. As shown in the chart of Exhibit H with respect to claim 8, installation videos show a space between the side panel and track side section of the CFS-TTS when placed on a track. STI understands that a similar space is present on the CFS-TTS MD. Differences, if any, are insubstantial with respect to claim 8. Accordingly, Hilti's CFS-TTS MD Firestop Top Track Seal includes a "first gasket side panel…spatially disposed from the first track side section to be moveable with respect thereto responsive to relative movement between the wall configuration and the upper building structure

Claim 8 of '232 Patent	Hilti's CFS-TTS MD Firestop Top Track Seal
	thereabove" and a "second gasket side panel…spatially disposed from the second track side section to be moveable with respect thereto responsive to relative movement between the wall configuration and the upper building structure thereabove."  *See also* CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

4. Hilti's CFS-TTS MD Firestop Top Track Seal infringes claim 9 of the '232 Patent.

Claim 9 of '232 Patent	Hilti's CFS-TTS MD Firestop Top Track Seal
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said first gasket upper panel and said first gasket side panel are made from an insulating material which includes a firestopping insulating component therewithin.	Hilti's website for the Firestop Top Track Seal CFS-TTS MD describes the product as a "Firestop Preformed solution for top-of-wall drywall joints under metal deck." CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576. Hilti's Product Information Sheet for the Firestop Top Track Seal describes applications for use of the product as "Firestop, smoke and sound seal for head-of-wall joints between gypsum walls to corrugated metal deck and metal roof decks." Ex. M (CFS-TTS MD Product Information Sheet). Furthermore, the Firestop Top Track Seal CFS-TTS MD is constructed from polyurethane foam, which is an insulating material. Ex. M (CFS-TTS MD Product Information Sheet). The polyurethane foam is impregnated with a firestopping material.

Claim 9 of '232 Patent	Hilti's CFS-TTS MD Firestop Top Track Seal
	 *See also* CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

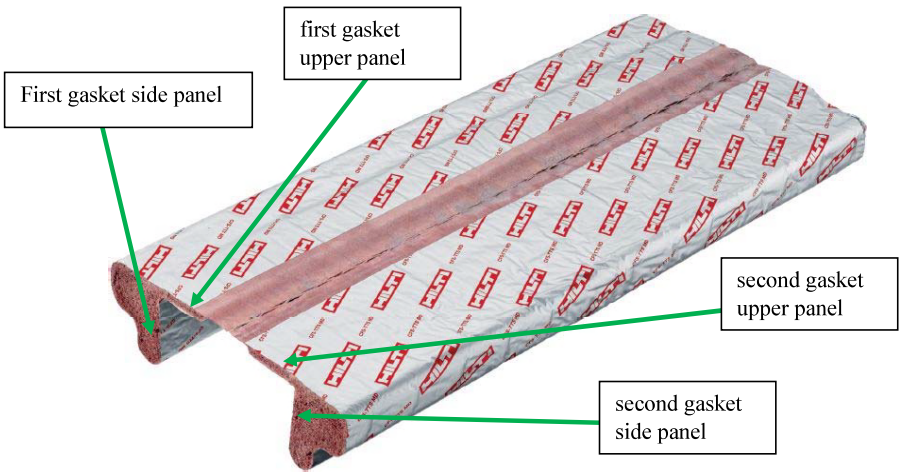
5. Hilti's CFS-TTS MD Firestop Top Track Seal infringes claim 10 of the '232 Patent.

Claim 10 of '232 Patent	Hilti's CFS-TTS MD Firestop Top Track Seal
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 9 wherein the firestopping insulating component is intumescent.	Hilti's website for the Firestop Top Track Seal CFS-TTS MD describes the product as a "Firestop Preformed solution for top-of-wall drywall joints under metal deck." CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576. Hilti's Product Information Sheet for the Firestop Top Track Seal describes applications for use of the product as "Firestop, smoke and sound seal for head-of-wall joints between gypsum walls to corrugated metal deck and metal roof decks." Ex. M (CFS-TTS MD Product Information Sheet). Furthermore, the Firestop Top Track Seal CFS-TTS MD is constructed from polyurethane foam, which is an insulating material. Ex. M (CFS-TTS MD Product Information Sheet). The polyurethane foam is impregnated with an intumescent firestopping material.

6. Hilti's CFS-TTS MD Firestop Top Track Seal infringes claim 11 of the '232 Patent.

Claim 11 of '232 Patent	Hilti's CFS-TTS MD Firestop Top Track Seal
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said first gasket upper panel and said first gasket side panel are made from an insulating material which includes an acoustical insulating component therewithin.	The Firestop Top Track Seal CFS-TTS MD includes a first gasket upper panel and said first gasket side panel that are made from an insulating material which includes an acoustical insulating component therewithin. Hilti's Product Information Sheet for the Firestop Top Track Seal CFS-TTS MD describes applications for use of the product as "Firestop, smoke and sound seal for head-of-wall joints between gypsum walls to corrugated metal deck and metal roof decks." Ex. M (CFS-TTS Product Information Sheet). Furthermore, the Firestop Top Track Seal CFS-TTS MD is constructed from polyurethane foam, which is an insulating material. Ex. M (CFS-TTS MD Product Information Sheet). Therefore, because it is a "sound seal" constructed from an insulating material, the CFS-TTS MD includes an acoustical insulating component.

7. Hilti's CFS-TTS MD Firestop Top Track Seal infringes claim 12 of the '232 Patent.

Claim 12 of '232 Patent	Hilti's CFS-TTS MD Firestop Top Track Seal
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said first gasket upper panel is integrally formed with respect to said first gasket side panel and wherein said second gasket upper panel is integrally formed with respect to said second gasket side panel.	The Firestop Top Track Seal CFS-TTS MD includes a first gasket upper panel that is integrally formed with respect to a first gasket side panel and a second gasket upper panel that is integrally formed with respect to a second gasket side panel. Specifically, as is illustrated by the cross-section edges in the images below, the first gasket upper panel and first gasket side panels are all made from one continuous piece of the same material, making them integrally formed. The same is true for the second gasket upper panel and second gasket side panel:  *See also* CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

Claim 12 of '232 Patent	Hilti's CFS-TTS MD Firestop Top Track Seal
	 *See* CFS-TTS MD Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r9599576.

EXHIBIT J

EXHIBIT J

Claim Charts Demonstrating Hilti's Infringement of Claims 6-8, 11, and 12 of Specified Technology Inc.'s U.S. Patent No. 9,157,232 (the "'232 Patent") by the Smoke & Acoustic Track Seal CS-TTS SA

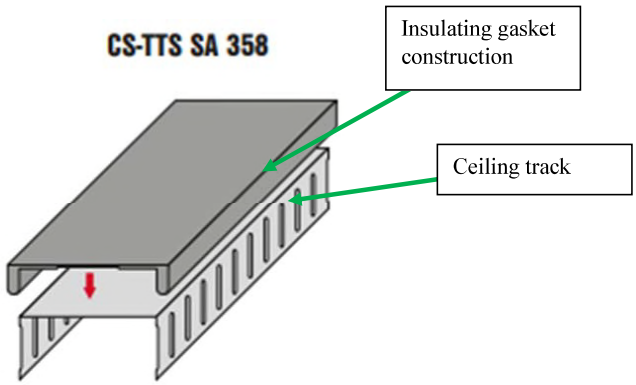
Accused Devices: (1) Hilti's Smoke & Acoustic Track Seal CS-TTS SA 358, (2) Smoke & Acoustic Track Seal CS-TTS SA 600, and (3) Smoke & Acoustic Track Seal CS-TTS SA OS. These accused devices are all variations of the Smoke & Acoustic Track Seal CS-TTS SA. Specifically, the Smoke & Acoustic Track Seal CS-TTS SA 358 is a seal to fit a 3 5/8" wide track, the Smoke & Acoustic Track Seal CS-TTS SA 600 is a seal to fit a 6" wide track. *See* Ex. P (SMOKE & ACOUSTIC TRACK SEAL CS-TTS SA Product Information Sheet). The Smoke & Acoustic Track Seal CS-TTS SA OS is a seal to fit a 3 5/8" wide track that is separable down the middle. *See* Ex. P (Smoke & Acoustic Track Seal CS-TTS SA Product Information Sheet); Ex. Q (Smoke & Acoustic Track Seal CS-TTS SA Instructions for Use).

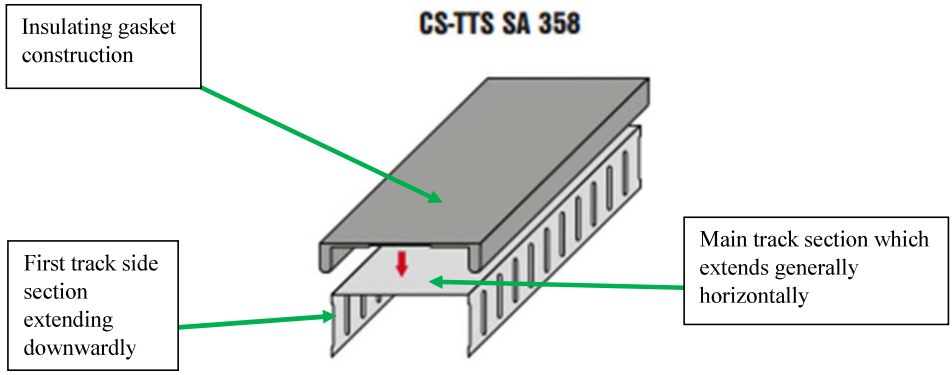
The differences between these three different versions of the Smoke & Acoustic Track Seal CS-TTS SA include the specific width dimensions of the seals, and the capability of being separated down the middle. These features are not material to the asserted claims of the '232 Patent. That is, none of these differences affect or are pertinent to the infringement assessment herein.

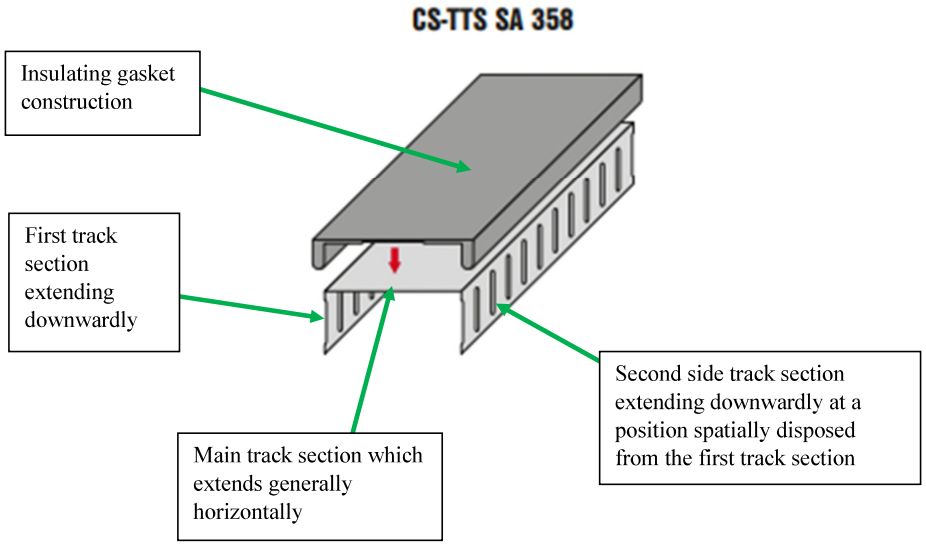
The chart below analyzes infringement of the Smoke & Acoustic Track Seal CS-TTS SA using the images provided on Hilti's website and other literature as an exemplary device, but the infringement allegations apply to both versions of the device.

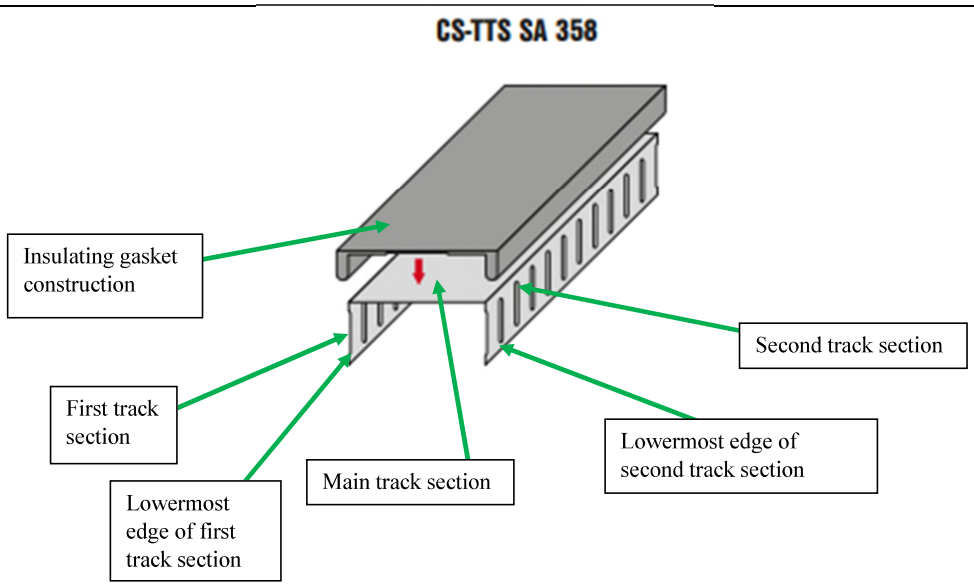
1. Hilti's Smoke & Acoustic Track Seal CS-TTS SA infringes claim 6 of the '232 Patent.

Claim 6 of '232 Patent	Hilti's Smoke & Acoustic Track Seal CS-TTS SA
[P1] An adjustable head-of-wall insulating construction for sealing a head-of-wall area between a ceiling thereabove and a	Hilti's Smoke & Acoustic Track Seal CS-TTS SA is an adjustable head of wall insulating construction for sealing a head-of-wall area between a ceiling thereabove and a wall configuration therebelow. Hilti's website and Product Information Sheet for the Smoke & Acoustic Track Seal CS-TTS SA describe the product as a "smoke and sound seal for head-of-wall joints between top track and gypsum to flat concrete slabs." CS-TTS SA Smoke & Acoustic Track Seal, Hilti,

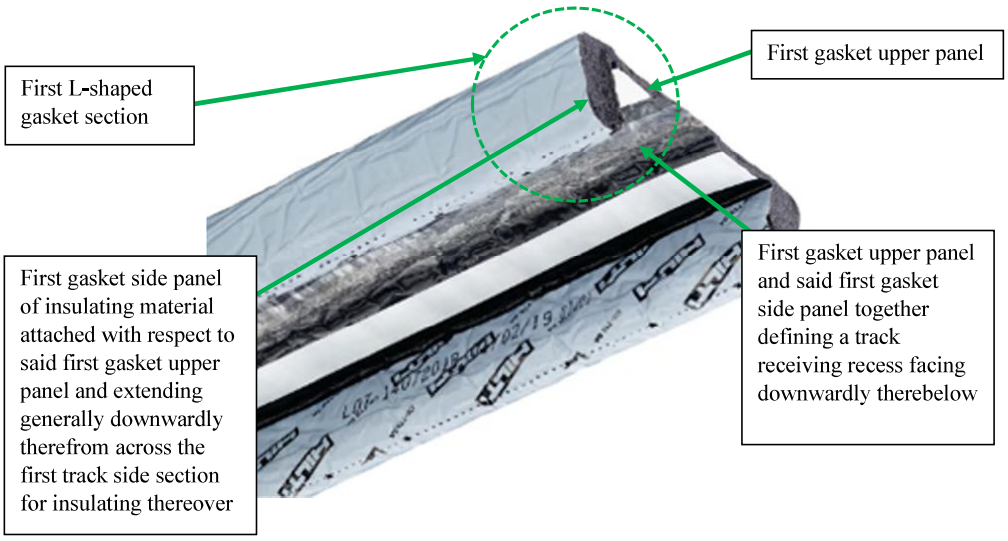
Claim 6 of '232 Patent	Hilti's Smoke & Acoustic Track Seal CS-TTS SA
wall configuration therebelow	https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686; Ex. P (Smoke & Acoustic Track Seal CS-TTS SA Product Information Sheet).  Hilti's Instructions for Use of the Smoke & Acoustic Track Seal CS-TTS SA provide an illustration of the product being installed over a ceiling track. Ex. Q (Smoke & Acoustic Track Seal CS-TTS SA Instructions for Use).

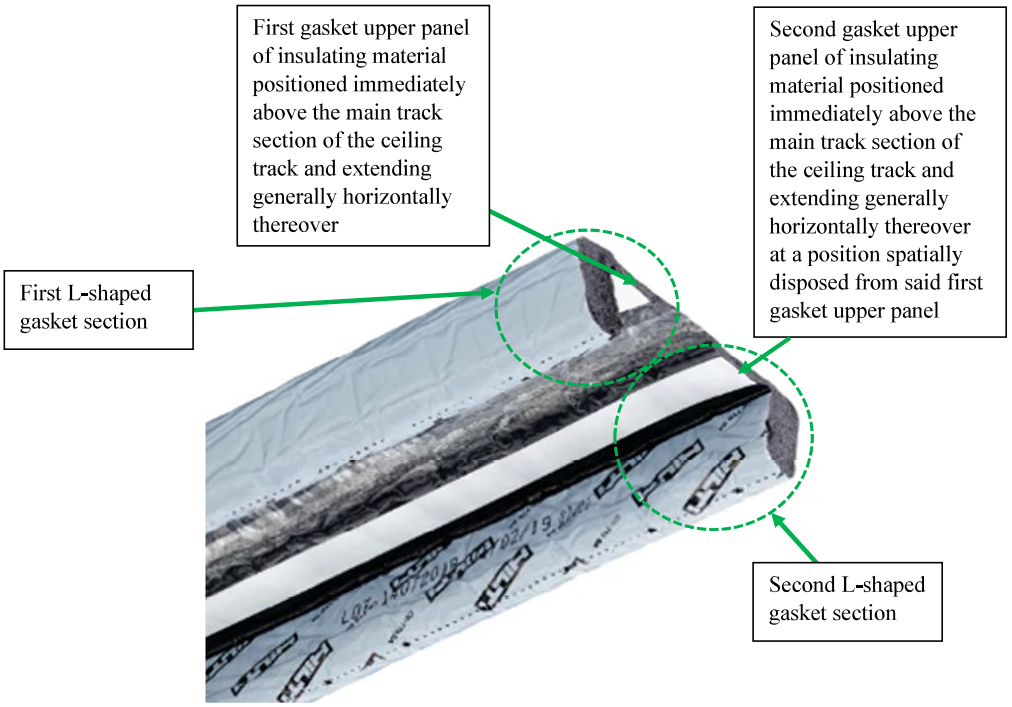
[P2] [a wall configuration] which is wider than standard and which includes a ceiling track having a main track section which extends generally horizontally and a first track side section extending downwardly therefrom and	Hilti's Product Information Sheet for the Smoke & Acoustic Track Seal CS-TTS SA further explains that "CS-TTS SA OS is a flexible solution for various track sizes." Ex. P (Smoke & Acoustic Track Seal CS-TTS SA Product Information Sheet). The Smoke & Acoustic Track Seal CS-TTS SA is produced in several different size variants for sealing head-of-wall area above a wider than standard wall configuration. At least a double stud wall is "wider than standard." *See* '232 Patent Specification, 10:29-34.  Ex. Q (Smoke & Acoustic Track Seal CS-TTS SA Instructions for Use).

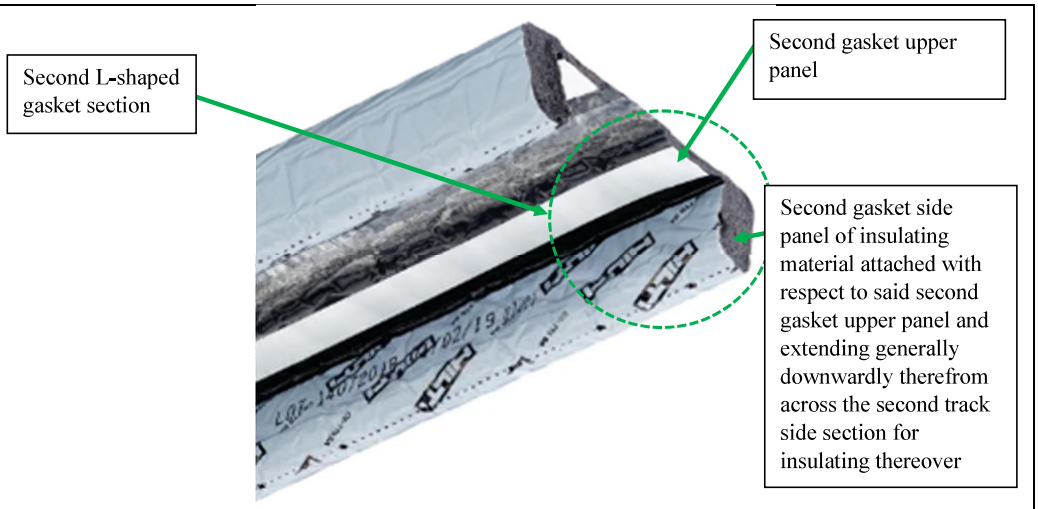
[P3] a second side track section extend downwardly therefrom at a position spatially disposed from the first track section	 Ex. Q (Smoke & Acoustic Track Seal CS-TTS SA Instructions for Use).

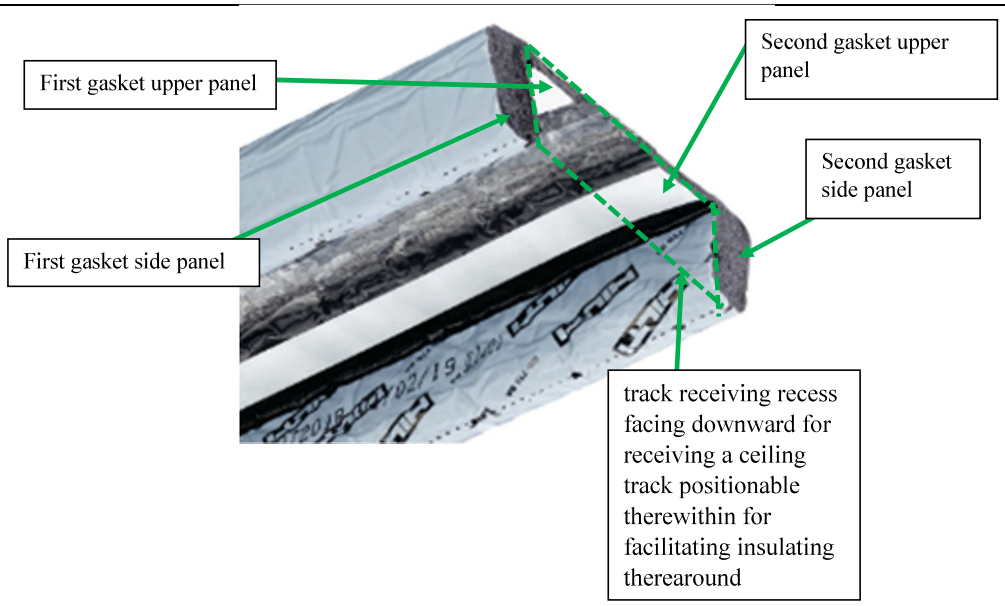
[P4] wherein the main track section includes a first track side section defining a first lowermost edge thereof and a second side track section defining a second lowermost edge thereof, said insulating gasket construction comprising:	 Ex. Q (Smoke & Acoustic Track Seal CS-TTS SA Instructions for Use).

A. a first L-shaped gasket section including: (1) a first gasket upper panel of insulating material positioned immediately above the main track section of the ceiling track and extending generally horizontally thereover; and	 CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686.

(2) a first gasket side panel of insulating material attached with respect to said first gasket upper panel and extending generally downwardly therefrom across the first track side section for insulating thereover, said first gasket side panel extending downwardly from said first gasket upper panel to define the generally L-shaped configuration of the first L-shaped gasket section, said first gasket upper panel and said first gasket side panel together defining a track receiving recess facing downwardly therebelow;	 CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686.

B. a second L-shaped gasket section including: (1) a second gasket upper panel of insulating material positioned immediately above the main track section of the ceiling track and extending generally horizontally thereover at a position spatially disposed from said first gasket upper panel; and	 CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686.

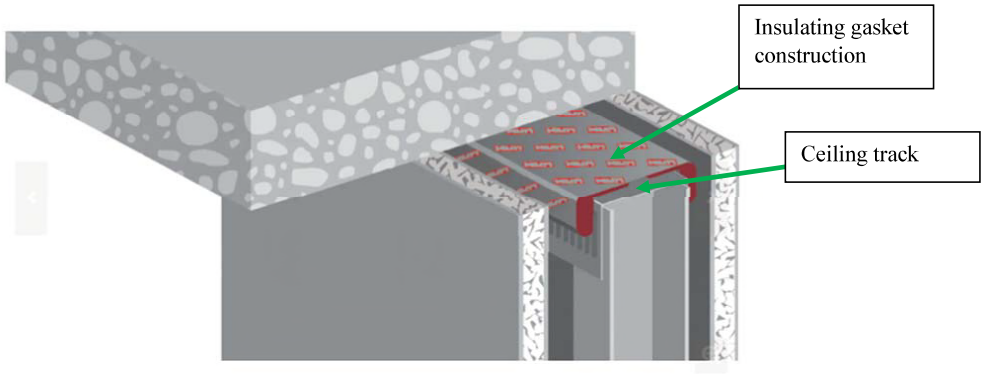
(2) a second gasket side panel of insulating material attached with respect to said second gasket upper panel and extending generally downwardly therefrom across the second track side section for insulating thereover, said second gasket side panel extending downwardly from said second gasket upper panel to define the generally L-shaped configuration of the second L-shaped gasket section,	 In addition, as shown in the photo, the second side gasket panel extends downwardly from the second gasket upper panel to define the generally L-shaped configuration of the second L-shaped gasket section. CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686.

said second gasket upper panel and said second gasket side panel and said first gasket upper panel and said first gasket side panel together defining a track receiving recess facing downward therebelow for receiving a ceiling track positionable therewithin for facilitating insulating therearound;	 CFS-TTS Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r5044710#nav%2Fclose.

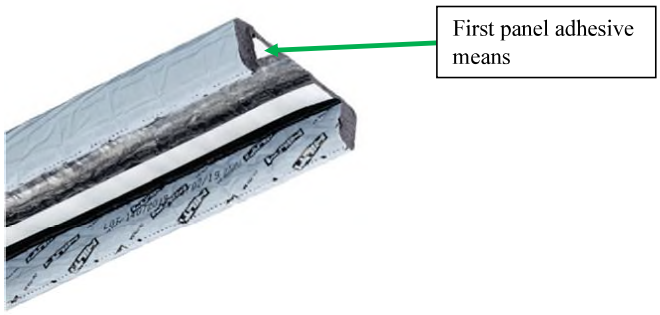


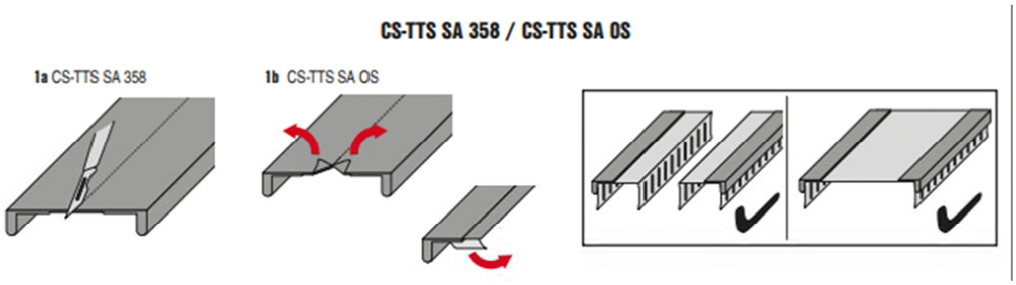
Hilti's Instructions for Use of the Smoke & Acoustic Track Seal CS-TTS SA provide an illustration of the product being installed over a ceiling track. Ex. Q (Smoke & Acoustic Track Seal CS-TTS SA Instructions for Use).

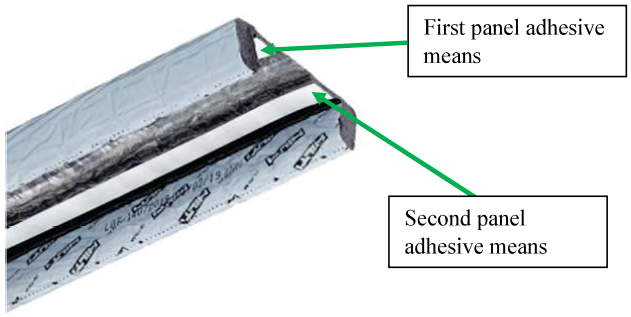
As another example, the CS-TTS SA can be installed similarly to the CFS-TTS and CFS-TTS MD, as shown in Ex. H and Ex. I. One of these such examples, is shown below:

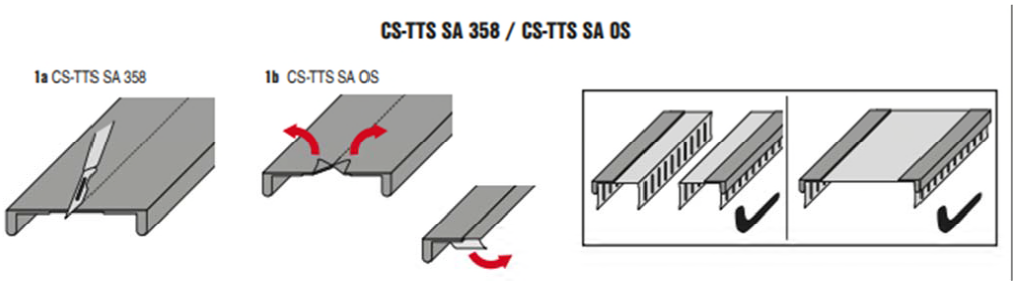


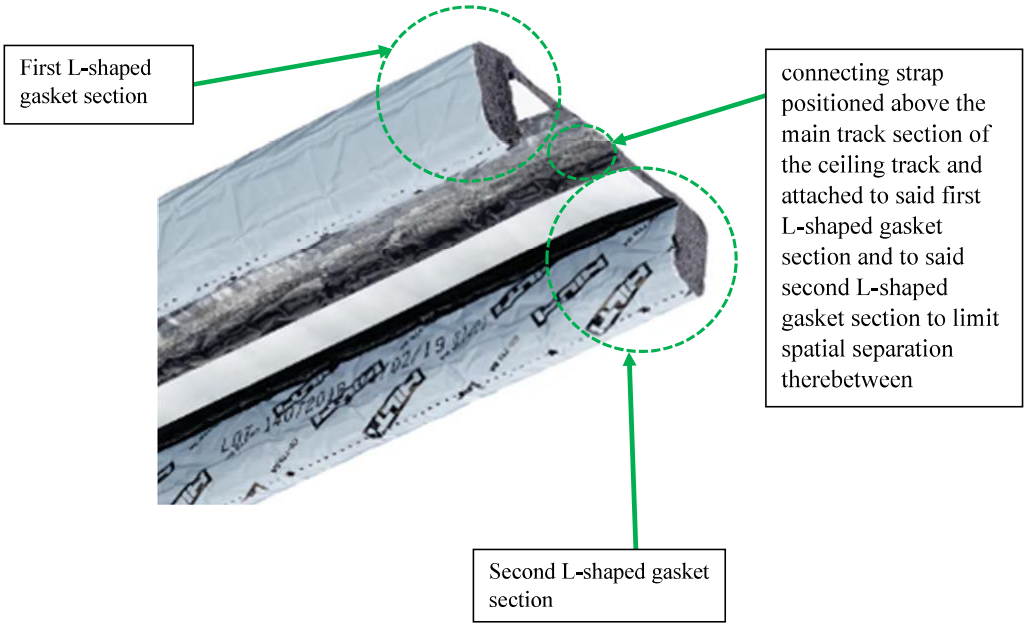
CFS-TTS Firestop Top Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r5044710#nav%2Fclose.

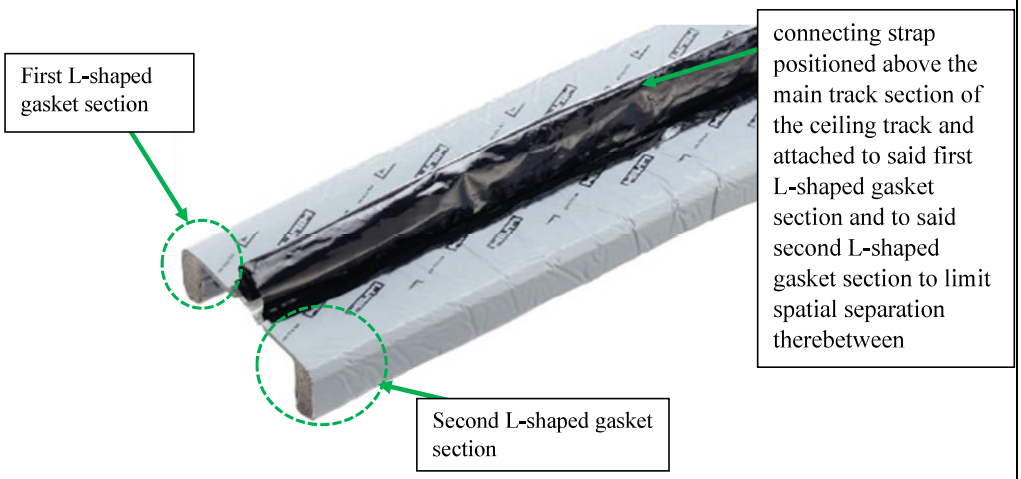
C. a first panel adhesive means mounted on said first gasket upper panel at a position between said first gasket upper panel of said first L-shaped gasket section and the main track section of the ceiling track to facilitate engagement therebetween;	Hilti's website and Product Information Sheet for the Smoke & Acoustic Track Seal CS-TTS SA both provide an image of the product having an adhesive strip on both upper panels. CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686; Ex. P (Smoke & Acoustic Track Seal CS-TTS SA Product Information Sheet).  CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686; Ex. P (Smoke & Acoustic Track Seal CS-TTS SA Product Information Sheet).

	Hilti's Instructions for Use of the Smoke & Acoustic Track Seal CS-TTS SA illustrates a white film being removed before installation:  Ex. Q (Smoke & Acoustic Track Seal CS-TTS SA Instructions for Use).

D. a second panel adhesive means mounted on said second gasket upper panel at a position between said second gasket upper panel of said second L-shaped gasket section and the main track section of the ceiling track to facilitate engagement therebetween; and	Hilti's website and Product Information Sheet for the Smoke & Acoustic Track Seal CS-TTS SA both provide an image of the product having an adhesive strip on both upper panels. CFS-TTS Firestop Top Track Seal, Hilti, CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686; Ex. P (Smoke & Acoustic Track Seal CS-TTS SA Product Information Sheet).  CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686; Ex. P (Smoke & Acoustic Track Seal CS-TTS SA Product Information Sheet).

	Hilti's Instructions for Use of the Smoke & Acoustic Track Seal CS-TTS SA illustrates a white film being removed before installation:  Ex. Q (Smoke & Acoustic Track Seal CS-TTS SA Instructions for Use).

E. at least one connecting strap positioned above the main track section of the ceiling track and attached to said first L-shaped gasket section and to said second L-shaped gasket section to limit spatial separation therebetween.	The Smoke & Acoustic Track Seal CS-TTS SA has a thin plastic strip that is a connecting strap positioned above the main track section of the ceiling track and attached to the first and second L-shaped gasket sections and limits spatial separation therebetween:  CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686.

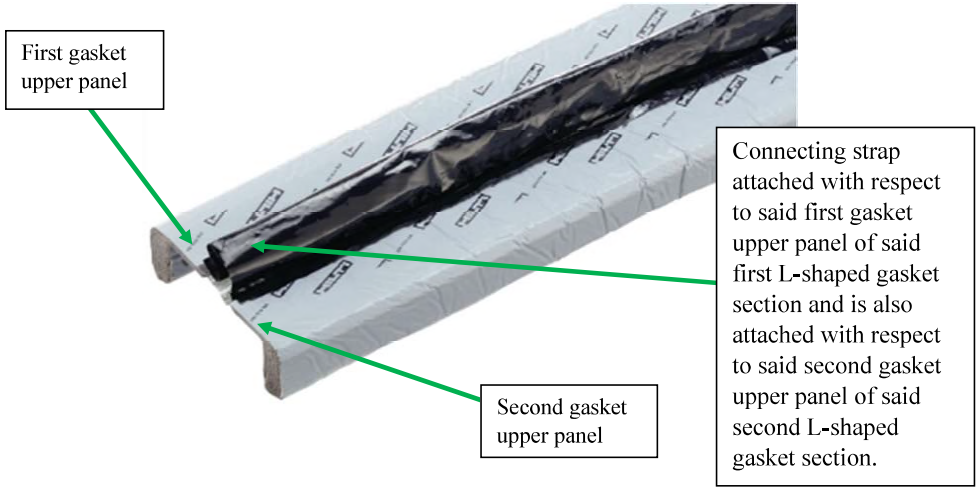


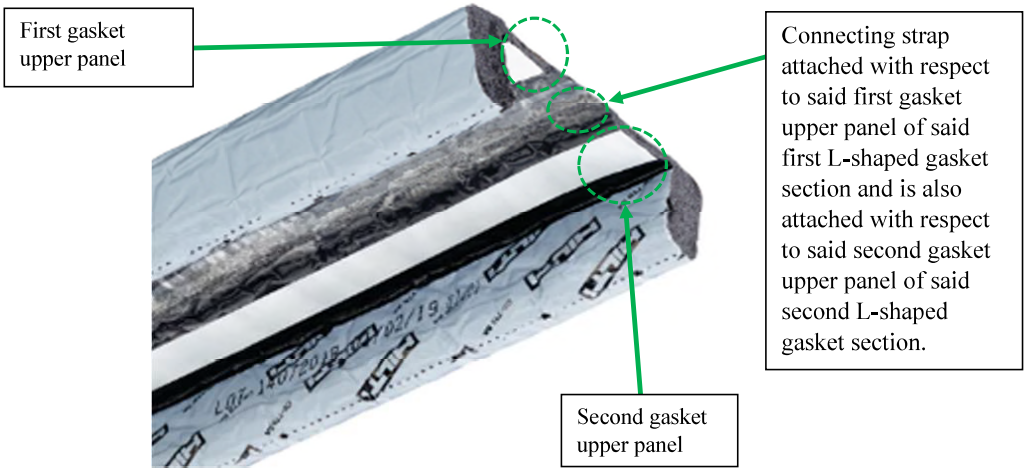
CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686.

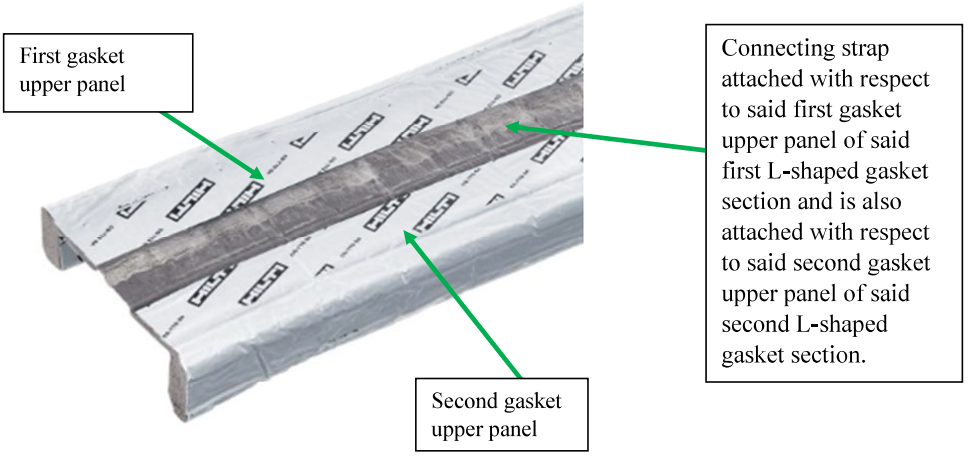
The CS-TTS SA Smoke & Acoustic Track Seals literally includes a connecting strap. Additionally, and in the alternative, the CS-TTS SA Smoke & Acoustic Track Seals include a connecting strap under the Doctrine of Equivalents. The center connecting portion of the CS-TTS SA Smoke & Acoustic Track Seals performs substantially the same function in substantially the same way to achieve substantially the same result as the claimed "connecting strap." Specifically, the function of

	the connecting strap is to connect the first L-shaped gasket section and to the second L-shaped gasket section to limit spatial separation therebetween. The center portion of the CS-TTS SA Smoke & Acoustic Track Seal does this; it connects to the L-shaped gasket sections and limits special separation between the sections. The connecting strap of CS-TTS SA OS limits spatial separation between the L-shaped gasket sections.

2. Hilti's Smoke & Acoustic Track Seal CS-TTS SA infringes claim 7 of the '232 Patent.

Claim 7 of '232 Patent	Hilti's Smoke & Acoustic Track Seal CS-TTS SA
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said at least one connecting strap is attached with respect to said first gasket upper panel of said first L-shaped gasket section and is also attached with respect to said second gasket upper panel of said second L-shaped gasket section.	The Smoke & Acoustic Track Seal CS-TTS SA has a thin plastic strip that is a connecting strap positioned above the main track section of the ceiling track and attached to both the first and second upper panels of the first and second L-shaped gasket sections:  CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686.

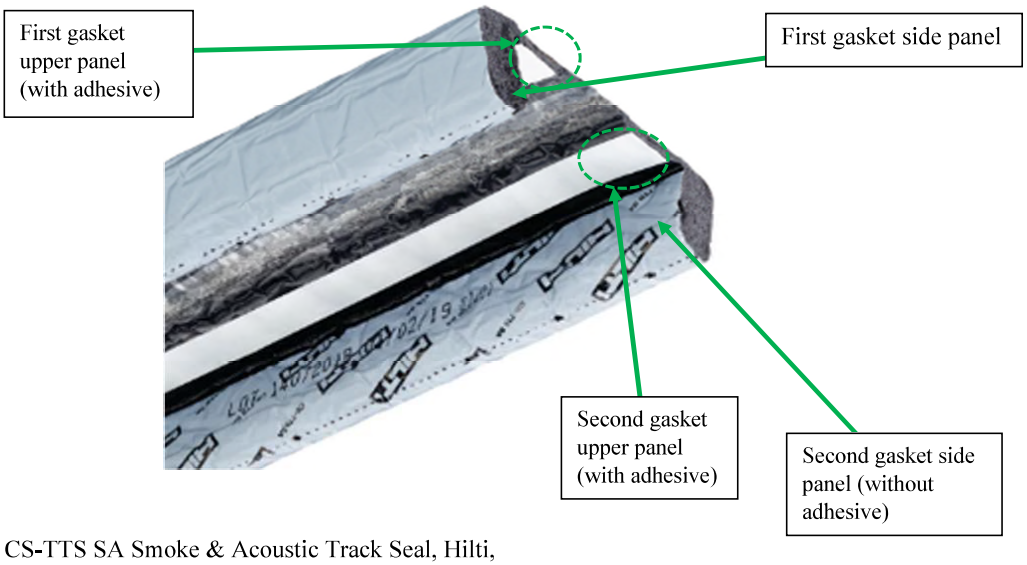
Claim 7 of '232 Patent	Hilti's Smoke & Acoustic Track Seal CS-TTS SA
	 CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686.

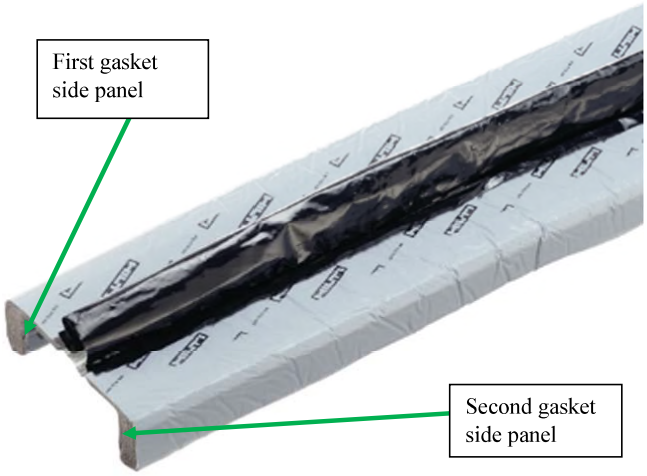
Claim 7 of '232 Patent	Hilti's Smoke & Acoustic Track Seal CS-TTS SA
	 CS-TTS SA Smoke and Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686#nav%2Fclose. As explained above with respect to claim 6, the CS-TTS SA Smoke and Acoustic Track Seals literally include a connecting strap. Additionally, and in the alternative, the Doctrine of Equivalents also applies. Specifically, the center connecting portion of the CS-TTS SA Smoke & Acoustic Track Seals performs substantially the same function in substantially the same way to achieve substantially the same result as the claimed "connecting strap." Specifically, the function of the connecting strap is to connect the first L-shaped gasket section and to the second L-shaped gasket section to limit spatial

Claim 7 of '232 Patent	Hilti's Smoke & Acoustic Track Seal CS-TTS SA
	separation therebetween. The center portion of the CS-TTS SA Smoke & Acoustic Track Seal does this; it connects to the L-shaped gasket sections and limits special separation between the sections.

3. Hilti's Smoke & Acoustic Track Seal CS-TTS SA infringes claim 8 of the '232 Patent.

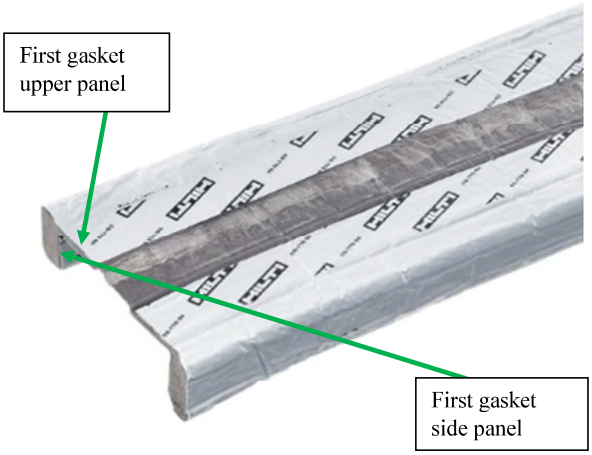
Claim 8 of '232 Patent	Hilti's Smoke & Acoustic Track Seal CS-TTS SA
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said first gasket side panel is spatially disposed from the first track side section to be moveable with respect thereto responsive to relative movement between the wall configuration and the upper building structure thereabove and wherein said second gasket side panel is spatially disposed from the second track side section to be moveable with respect thereto responsive to relative movement between the wall configuration and the upper building structure thereabove.	The Smoke & Acoustic Track Seal CS-TTS SA does not have any direct attachment between the first and second gasket side panels and the first and second track side sections, respectively. For example, the first and second gasket side panels do not have any adhesive or any other structure to connect them directly to the first and second track side sections. Nor do the first and second track side sections include any adhesive or any other structure to connect them directly to the first and second gasket side panels. As explained in the specification of the '232 Patent, this lack of direct attachment permits the side panels to be spatially disposed from the track and permits the side sections to be moveable with respect to the track side sections responsive to relative movement between the wall configuration and the upper building structure thereabove. See '232 Patent, 8:52-9:12 ("This absence of any direct attachment between first track side section 20 and first gasket side panel 71 as well as the lack of direct attachment between the second track side section 22 and the second gasket side panel 77 allows this freedom of movement to respond to relative structural movement while still maintaining the gasket side panels 71 and 77 at positions adjacent the respective track side section 20 and 22 while maintaining positioning of the gasket side panels 71 and 77 extending generally thereover to facilitate insulation thereadjacent."). Furthermore, nothing in Hilti's Instructions for Use on its website suggests that that there is any connection between the first and second gasket side panels and first and second track side sections that prevents the first and second track side sections from being moveable with respect to the first and second gasket side panels. Accordingly, Hilti's Smoke & Acoustic Track Seal CS-TTS SA includes a "first gasket side panel…spatially disposed from the first track side section to be moveable with respect thereto responsive to relative movement between the wall configuration and the upper building structure thereabove" and a "second gasket side panel…spatially disposed from the second track side section to be moveable with respect thereto responsive to relative movement between the wall configuration and the upper building structure thereabove."

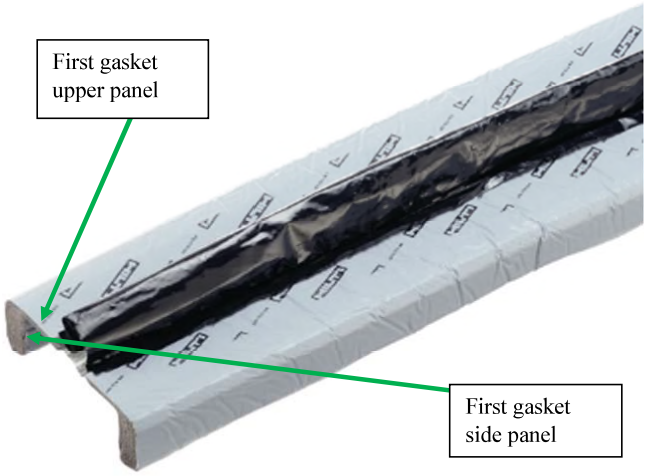
Claim 8 of '232 Patent	Hilti's Smoke & Acoustic Track Seal CS-TTS SA
	 CS-TTS SA Smoke & Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686.

Claim 8 of '232 Patent	Hilti's Smoke & Acoustic Track Seal CS-TTS SA
	 CS-TTS SA Smoke and Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686#nav%2Fclose.

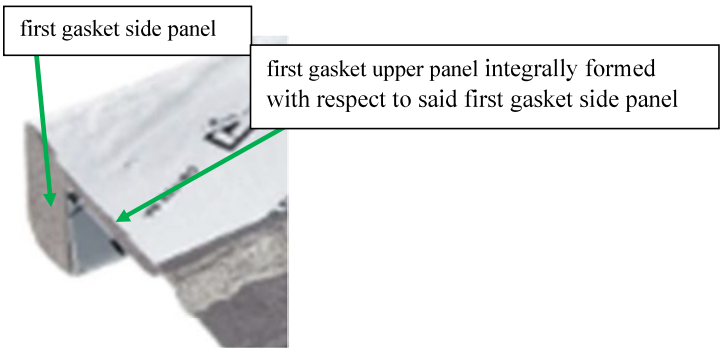
4. Hilti's Smoke & Acoustic Track Seal CS-TTS SA infringes claim 11 of the '232 Patent.

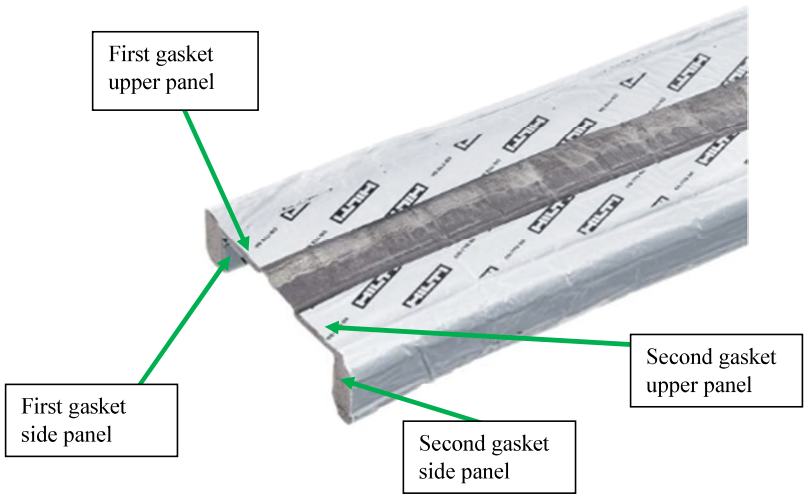
Claim 11 of '232 Patent	Hilti's Smoke & Acoustic Track Seal CS-TTS SA
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said first gasket upper panel and said first gasket side panel are made from an insulating material which includes an acoustical insulating component therewithin.	The Smoke & Acoustic Track Seal CS-TTS SA includes a first gasket upper panel and said first gasket side panel that are made from an insulating material which includes an acoustical insulating component therewithin. Hilti's website for the Smoke and Acoustic Track Seal describes the product as a "Smoke and sound seal for head-of-wall joints between top track and gypsum to flat concrete slabs." CS-TTS SA Smoke and Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686#nav%2Fclose. Hilti's Product Information Sheet for the Smoke and Acoustic Track Seal describes applications for use of the product as "Smoke and sound seal for head-of-wall joints between top track and gypsum to flat concrete slabs." Ex. P (Smoke & Acoustic Track Seal CS-TTS SA Product Information Sheet). Furthermore, the Smoke & Acoustic Track Seal CS-TTS SA is constructed from polyurethane foam, which is an insulating material. Ex. P (Smoke & Acoustic Track Seal CS-TTS SA Product Information Sheet). Therefore, because it is a "sound seal" constructed from an insulating material, the CFS-TTS includes an acoustical insulating component.

Claim 11 of '232 Patent	Hilti's Smoke & Acoustic Track Seal CS-TTS SA
	 CS-TTS SA Smoke and Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686#nav%2Fclose.

Claim 11 of '232 Patent	Hilti's Smoke & Acoustic Track Seal CS-TTS SA
	 CS-TTS SA Smoke and Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686#nav%2Fclose.

5. Hilti's CFS-TTS Firestop Top Track Seal infringes claim 12 of the '232 Patent.

Claim 12 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
An adjustable head-of-wall insulating construction for sealing a head-of-wall area as defined in claim 6 wherein said first gasket upper panel is integrally formed with respect to said first gasket side panel and wherein said second gasket upper panel is integrally formed with respect to said second gasket side panel.	The Smoke & Acoustic Track Seal CS-TTS SA includes a first gasket upper panel that is integrally formed with respect to a first gasket side panel and a second gasket upper panel that is integrally formed with respect to a second gasket side panel. Specifically, as is illustrated by the cross-section edges in the images below, the first gasket upper panel and first gasket side panels are all made from one continuous piece of the same material, making them integrally formed. The same is true for the second gasket upper panel and second gasket side panel:  CS-TTS SA Smoke and Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686#nav%2Fclose.

Claim 12 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
	 CS-TTS SA Smoke and Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686#nav%2Fclose.

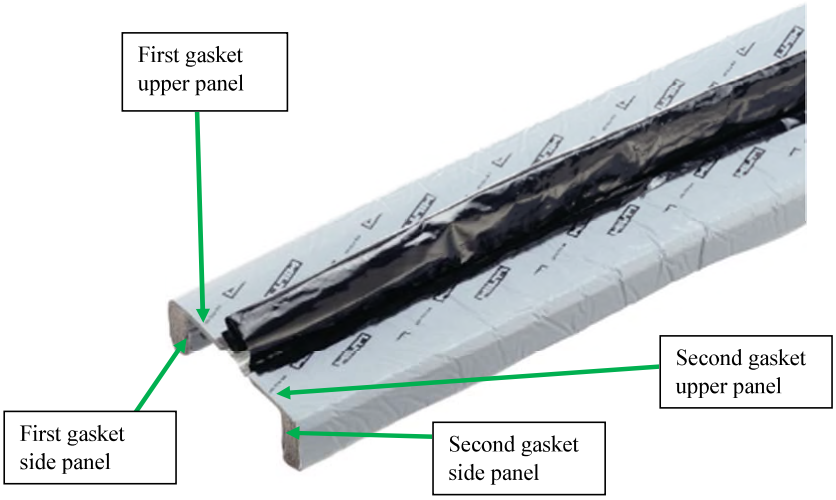
Claim 12 of '232 Patent	Hilti's CFS-TTS Firestop Top Track Seal
	 CS-TTS SA Smoke and Acoustic Track Seal, Hilti, https://www.hilti.com/c/CLS_FIRESTOP_PROTECTION_7131/CLS_PREFABRICATED_JOINTS_7131/r7433686#nav%2Fclose.

EXHIBIT K

Product Information

FIRESTOP TOP TRACK SEAL CFS-TTS



Product description

- Eliminate the need to caulk ceiling and wall joints in flat concrete construction with Hilti's Top Track Seal (TTS) solutions — simply saddle your track with TTS, install it, and you're done. No mess, zero waste.

Applications for use

- Firestop, smoke and sound seal for head-of-wall joints between top track and gypsum to flat concrete slabs
- CFS-TTS 358/600 is designed for a perfect friction fit with common track sizes — 3-5/8" and 6"
- CFS-TTS OS is a flexible solution for various track sizes

Advantages

- Fast installation — fewer working steps
- Excellent sealing properties designed for reliability under real jobsite conditions — STC and smoke seal on imperfect concrete
- Tested in accordance with the most up-to-date standard UL 2079 5th edition
- No mess, zero waste — no caulking required
- Ideal shape designed to saddle over top track without additional folding, taping, or gluing

Installation instructions

- See Hilti Literature or third-party listings for complete application and installation details

Technical Data

Chemical basis	Polyurethane foam
Color	CFS-TTS: Silver/Red CFS-TTS R: Black/White
Recommended Application temperature	23° to 122°F
Storage and transportation temperature range	14° to 122°F
Temperature resistance range	14° to 122°F
Movement	Approx. ±50%
Mold and mildew performance	Class 0 (ASTM G21-96)
Tested in accordance with	UL 2079 (5th Edition), ASTM E1966, ASTM E119, CAN/ULC-S115
Surface burning characteristics	Flame Spread 10 Smoke Development 20 ASTM E84 Flame Spread 15 Smoke Development 35 CAN/ULC-S102
LEEDv4.1 Compliant	CDPH Standard Method v1.2-2017
LEED VOC	22 g/L
Length	120 inches
Acoustics performance	61 (relates to specific construction) ASTM E90
Shelf Life	Unlimited
Paintable	Yes

Order Designation	Sales pack quantity	Item number
CFS-TTS 358 (3-5/8" track)	20	2217390
CFS-TTS OS (3-5/8" track)	20	2217392
CFS-TTS 600 (6" track)	20	2217391
CFS-TTS 212 (2-1/2" track)	20	2275179
CFS-TTS R OS (3-5/8" track)	20	2275178





FM APPROVED

CLASSIFIED C UL US

FBC SYSTEM COMPATIBLE

Hilti Firestop
Saving lives through innovation and education

EXHIBIT L

CFS-TTS

2131981-11.2019

Top Track Seal CFS-TTS

Firestop top track seal | Coupe-feu pour profils supérieurs
Perfil cortafuego de techo

qr.hilti.com/r5044710

UL: www.hilti.com
cUL: www.hilti.ca
www.hilti.group

en Before handling and for specific application details, refer to Hilti product literature, 3rd party published listings and national approvals. For professional use only.
fr Avant toute utilisation et pour tout détail concernant une application, se référer à la documentation Hilti, à la liste de publications des tierces parties et aux approbations nationales. Seulement pour utilisateurs professionnels.
es Antes de usar y para detalles específicos de aplicación, véase la información que acompaña al producto Hilti, el listado publicado por terceros y las aprobaciones nacionales. Solamente para los usuarios profesionales.

1

CFS-TTS 358 / CFS-TTS 212

CFS-TTS 600

1 2

CFS-TTS 358 / CFS-TTS OS

1a CFS-TTS 358

1b CFS-TTS OS

2

+ ½"

3

DX/GX/BX

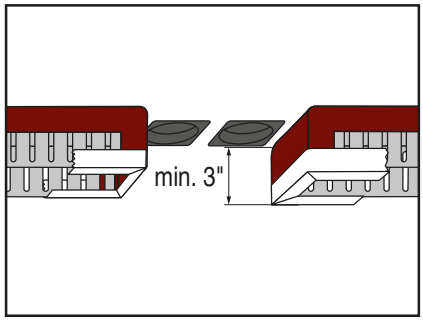
4

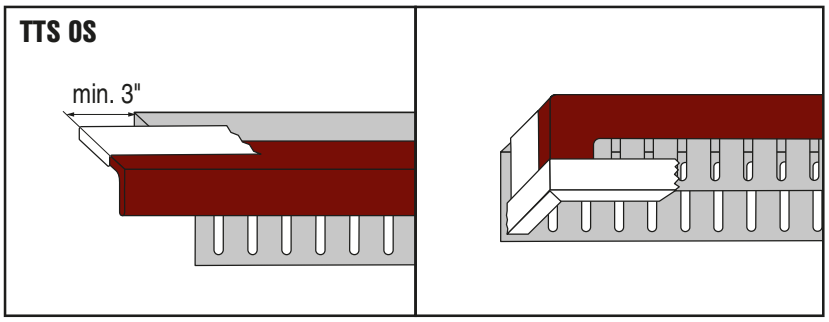
5

6

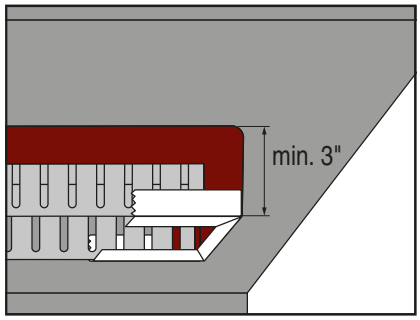
UL

FLOOR PENETRATION / PENETRATION PLAFOND





PERIMETER WALL / MUR D'ENCEINTE



BOTTOM-OF-WALL / BAS DE MUR

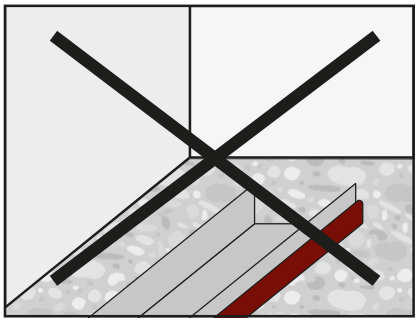


EXHIBIT M

Product information

FIRESTOP TOP TRACK SEAL CFS-TTS MD OS & CFS-TTS MD 600



Product description

- Preformed firestop solution for top-of-wall drywall joints in metal deck construction — eliminates the need for time consuming methods such as stuffing and spraying. No mess, zero waste

Applications for use

- Firestop, smoke and sound seal for head-of-wall joints between gypsum walls to corrugated metal deck and metal roof decks
- CFS-TTS MD OS is designed for a flexible solution for various track sizes, applications and joints around the beam

Advantages

- Quick and simple installation — designed to help increase your productivity and reduce labor costs — fewer working steps (one and done)
- Significantly boosts your productivity vs. traditional methods: stuff and spray and castle cut drywall — allowing you to meet your critical construction time-lines
- No spray, no mess, no equipment, no power needed and zero waste
- Hilti foil protected plugs and covers are easy to install and provide a tight smoke and sound seal with no itchy mineral wool exposed to the installer
- Hilti-branded foils allow for easy inspections
- Preformed firestop solutions make 3rd party destructive testing easier to pass

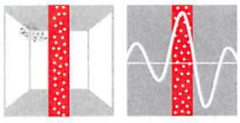
Installation instructions

- See Hilti literature or third-party listings for complete application and installation details

Technical Data

Chemical basis	Polyurethane foam
Color	Silver/Red
Recommended application temperature	23° to 122°F (-5° to 50°C)
Storage and transportation temperature range	14° to 122°F (-10° to 50°C)
Temperature resistance range	14° to 122°F (-10° to 50°C)
Movement	Approx. ±50%
Mold and mildew performance	Class 0 (ASTM G21-96)
Tested in accordance with	UL 2079 (5th Edition), ASTM E1966, CAN/ULC-S115
Surface burning characteristics (ASTM E 84, CAN/ULC-S102)	Flame Spread 5 Smoke Development 20
LEEDv4.1 Compliant	CDPH Standard Method v1.2-2017
LEED VOC	2 g/L
Package Includes	120 Linear Feet / (12) 10ft pcs per box
Acoustics performance	59 (relates to specific construction) ASTM E90
Shelf Life	Unlimited
Paintable	Yes

Order designation	Sales pack quantity	Item number
CFS-TTS MD OS (3-5/8")	12	2226875
CFS-TTS MD 600 (6")	12	2226876



Accessories
CFS-TTS MD P Firestop Top Track Plug (1.5" / 2" / 3")
CFS-TTS MD C Firestop Top Track Cover (1.5" / 2" / 3")



Hilti Firestop
Saving lives through innovation and education

DBS • 03/20

EXHIBIT N

Installation guide for CFS-TTS MD

Hilti Firestop Top Track Seal for metal deck

Top Track Seal CFS-TTS MD is a firestop, smoke and sound seal for rated head-of-wall joints between top track and gypsum to corrugated metal deck slabs and metal roof decks. This guideline covers different installation situations of rated wall systems. Should a specific installation situation deviate from a listing please reach out to the Hilti Fire Protection Engineering team to see if an engineering judgement is possible.

CONTENTS

- Track is perpendicular to flute – Page 2-3
- Track is parallel to flute – Page 4
- Track is cantilevered to flute – Page 5
- Track runs diagonal across fluting – Page 6
- Corner intersections - parallel & perpendicular – Page 7-8
- Track is parallel under I- Beam with Z-Clips – Page 9
- Wall around fireproofed beam / bar joist – Page 10-11
- Wall running parallel or offset to beam and perpendicular to flutes – Page 12-13
- Pipe or cast-in device intersecting track perpendicular – Page 14
- Pipe or cast-in device intersecting track parallel – Page 15
- Shaft wall – Page 16
- Rated wall to the underside of a Non-rated metal roof deck – Page 17
- Non-fireproofed beam running perpendicular to flutes – Page 18

TECHNICAL SUPPORT

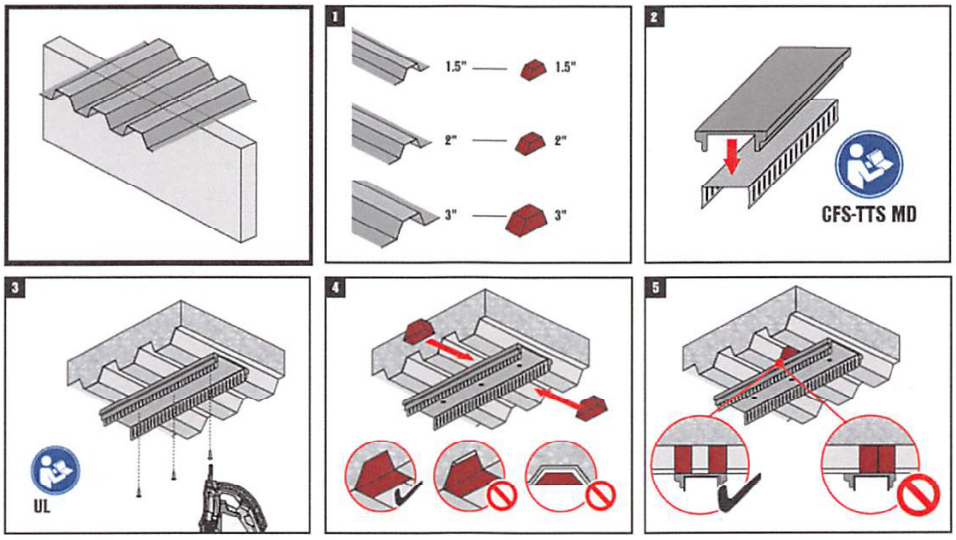
There will always be situations when a current UL-listed system doesn't accommodate your particular application. When that happens, bring your questions to the Hilti firestop experts.

To request an Engineering Judgment, please download the Engineering Judgment Request Form at: https://www.hilti.com/. Once you have saved the completed file, please send the completed EJ request form to: usfirestopeng@hilti.com

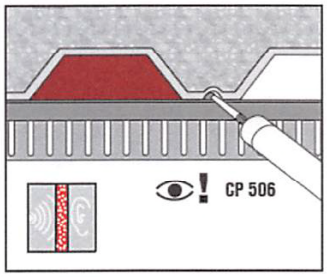
Version Date: 11/2021

TRACK IS PERPENDICULAR TO FLUTE

- Please read the UL listing HW-D-0871
- Insert Hilti CFS-TTS MD Plug 1.5", 2" or 3" flush with CFS-TTS MD OS & 600



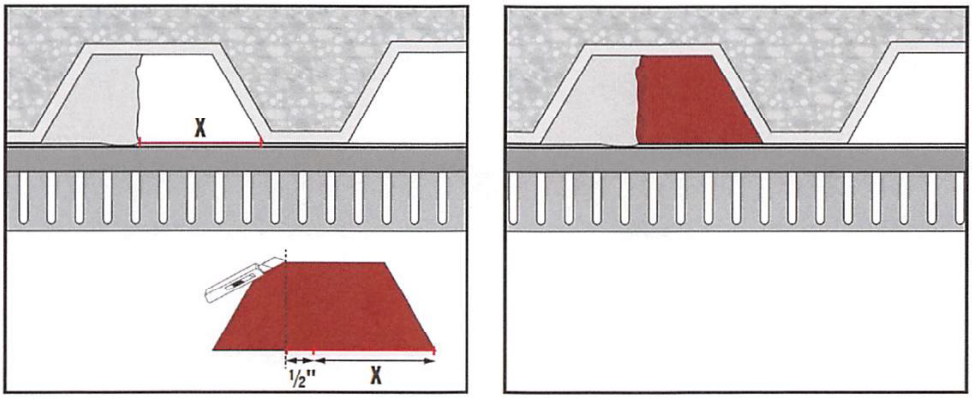
- If required: steel deck bottom flange stiffeners can be filled on one side or two sides with acoustical sealant or "*slivers*" of TTS MD for high acoustical performance assemblies (this application is **not** required to achieve a fire, leakage & standard acoustical ratings per the UL tested system & STC reporting)



Version Date: 11/2021

- Overspray (e.g. Monokote) in the flute (e.g. close to beams) should be scraped off before the installation of the plugs and ensure a tight fit

- If the flute opening is not allowing a full plug to be installed the plug should be cut down with a minimum of ½" oversize of the addressable opening. Please ensure that no mineral wool is exposed, using aluminum foil tape. An installation on both sides is still required. Please read the UL listing HW-D-0871.

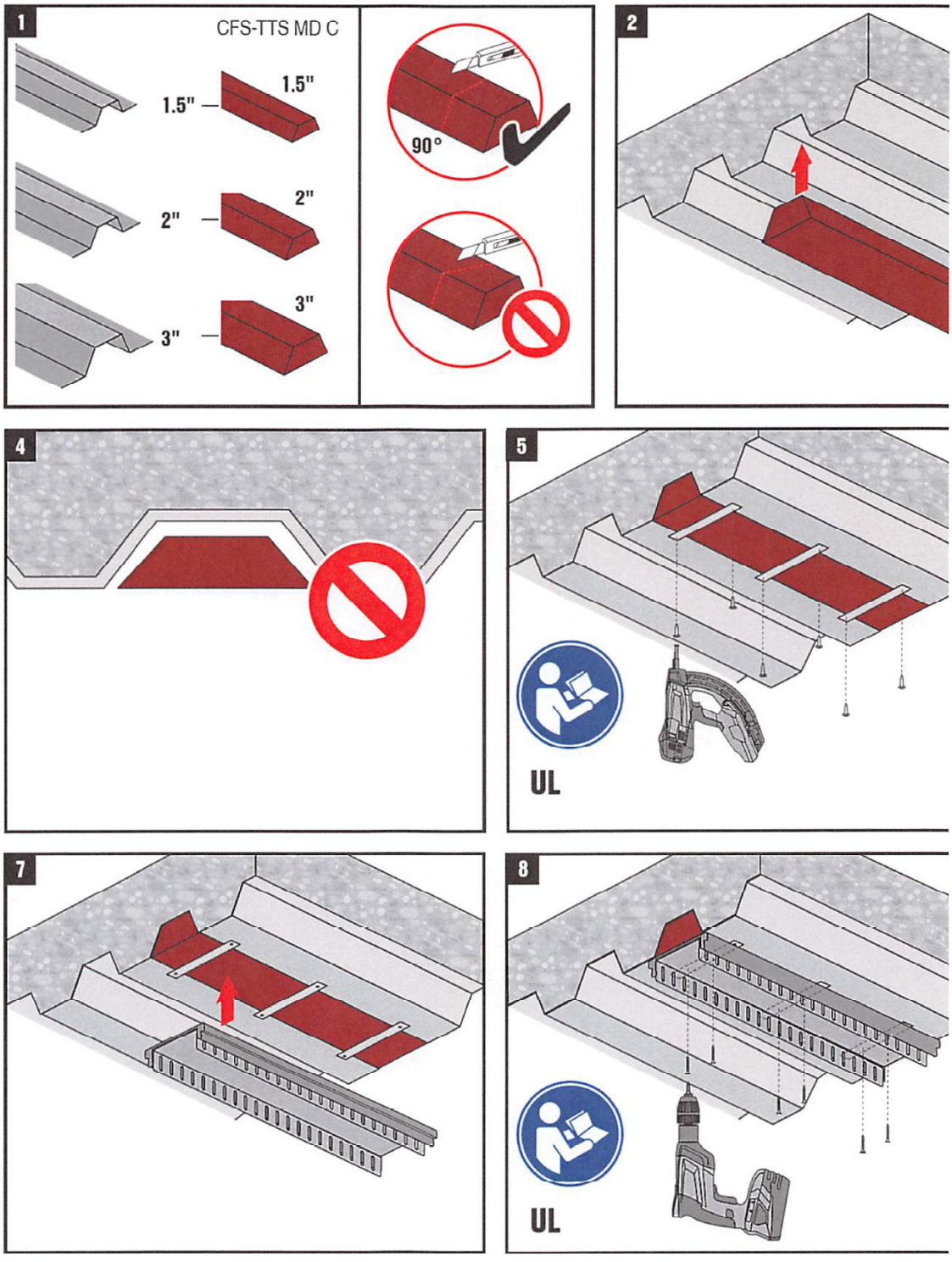


- The product also works on rated metal decks already protected with cementitious spray (e.g. Monokote). If the metal deck needs to be fully protected with cementitious fireproofing, installing Z-clips prior to spraying would allow the combination of the top-tracks and Hilti CFS-TTS MD system. All flutes need then to be filled with fireproofing. Please refer to the UL listing HW-D-0871 for walls running perpendicular to flute for further details.

TRACK IS PARALLEL TO FLUTE

- Please read the UL listing HW-D-0873
- Insert Hilti CFS-TTS MD Covers 1.5", 2" or 3" supported by steel straps before installing CFS-TTS MD OS & 600

Version Date: 11/2021



Version Date: 11/2021

- The product also works on rated metal decks already protected with cementitious spray (e.g. Monokote). If the metal deck needs to be fully protected with cementitious fireproofing, installing Z-clips prior to spraying would allow the combination of the top-tracks and Hilti CFS-TTS MD system. All flutes need then to be filled with fireproofing. Please refer to the UL listing HW-D-0872 for walls running parallel to flute for further details.

Version Date: 11/2021