



● Compliance with International Codes
● Compliance with State Codes

ICC-ES Evaluation Report ESR-4826

Reissued June 2022

This report is subject to renewal June 2024.

DIVISION: 05 00 00—METALS
Section: 05 05 23—Metal Fastenings

DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES
Section: 06 05 23—Wood, Plastic, and Composite Fastenings

DIVISION: 09 00 00—FINISHES
Section: 09 22 16.23—Fasteners

REPORT HOLDER:

KYOCERA SENCO INDUSTRIAL TOOLS, INC.

EVALUATION SUBJECT:

SENCO SELF-DRILLING AND SELF-PIERCING SCREWS – MISCELLANEOUS MATERIALS TO STEEL

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, 2012 and 2009 *International Building Code*® (IBC)
- 2021, 2018, 2015, 2012 and 2009 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)[†]

[†]The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

Properties evaluated:

- Structural

2.0 USES

The Senco self-drilling and self-piercing screws are used to connect gypsum wall board, wood or other building materials to cold-formed steel. The screws are used in sheathing to steel connections, as prescribed in the code, and as specified in engineered designs.

3.0 DESCRIPTION

3.1 General:

The Senco self-drilling screws are tapping screws, case-hardened from carbon steel conforming to ASTM A510 Grade 1022. Tables 1A through 1E provide screw

designations, model numbers, descriptions including screw nominal size, threads per inch (tpi), length, screw diameter, drive recess, head style, head diameter, point style, drilling/piercing ranges, minimum required protrusion length and coatings. Screws are supplied in boxes or tubs of individual screws or in collated screw strips.

3.2 PBH Self-drilling Screws:

The #6 and #8 PBH self-drilling screws comply with ASTM C954, with a type “BSD” thread design. The screws have a Phillips bugle head (PBH) style and have a clear zinc coating, a gray phosphate coating or an exterior coating, as indicated in Table 1A. See Figure 1.

3.3 PBH Self-piercing Screws:

The #6 PBH self-piercing screws comply with ASTM C1002, Type S, with a fine thread design. The screws have a Phillips bugle head (PBH) and have a clear zinc coating, a gray phosphate coating or an exterior coating, as indicated in Table 1B. See Figure 2.

3.4 PWH Self-drilling Screws:

The #8 PWH self-drilling screws comply with ASTM C1513, with a coarse thread design. The screws have a Phillips reduced wafer head (PWH) style, and have a clear zinc coating, as indicated in Table 1C. See Figure 3.

3.5 SPWH Self-drilling Screws:

The #8 SPWH self-drilling screws comply with ASTM C1513, with a type “BSD” thread design. The screws have a square pan with washer head (SPWH) style and have a clear zinc coating, as indicated in Table 1D. See Figure 4.

3.6 SWNH, SFH and RFH Self-drilling Screws:

The #8 and #10 SWNH, #8 SFH and #12 RFH self-drilling screws comply with ASTM C1513, with a coarse thread design. The screws have a square wafer with nibs head (SWNH) style, square flat head (SFH) style and Rex flat head (RFH) style, respectively, and have a clear zinc coating, a yellow zinc coating or an exterior coating, as indicated in Table 1E. See Figures 5 through 8.

3.7 Cold-formed Steel:

Cold-formed steel material must comply with Section A3.1 of AISI S100 (Section A2.1 of AISI S100 for the 2015, 2012 and 2009 IBC).

4.0 DESIGN AND INSTALLATION

4.1 Design:

4.1.1 General: Selection of screw length must be based on the thickness of the of the fastened material, the thickness of the steel base material and the minimum required protrusion past the back side of the supporting steel. See Tables 1A through 1E for the required protrusion lengths.

The screw point style must be selected on the basis of drilling capacity, which is shown in Tables 1A through 1E. The tabulated drilling capacity refers to the thickness of the supporting steel member. Evaluation of the ability of the screw to self-drill through the attached building material is outside the scope of this report.

When tested for corrosion resistance in accordance with ASTM B117, screws with coatings described in this report met the minimum requirement listed in ASTM F1941, as required by ASTM C1513, with no white corrosion after three hours and no red rust after 12 hours.

4.1.2 Prescriptive Design:

4.1.2.1 Senco PBH Self-drilling Screws (Section 3.2): These screws have been evaluated for use in fastening gypsum board to cold-formed steel framing 0.033 inch to 0.112 inch (0.8 to 2.8 mm) thick, in accordance with IBC Section 2506 and IRC Section R702.3.5.1 (2012 and 2009 IRC Section R702.3.6). They have also been evaluated for use in attaching gypsum board sheathing to cold-formed steel framing as prescribed in Section B5.2.2.3.4 of AISI S240, which is referenced in IBC Section 2211.1 [Section C2.2.3 of AISI S213, which is referenced in 2015 and 2012 IBC Section 2211.6 (2009 IBC Section 2210.6)].

4.1.2.2 Senco PBH Self-piercing Screws (Section 3.3): These screws have been evaluated for use in fastening gypsum board to cold-formed steel framing less than 0.033 inch (0.84 mm) thick, in accordance with IBC Section 2506 and IRC Section R702.3.5.1 (2012 and 2009 IRC Section R702.3.6).

4.1.2.3 Senco PWH, SWNH, SFH and RFH Self-drilling Screws: The PWH screws described in Section 3.4 and the SWNH, SFH and RFH screws described in Section 3.5 may be used where ASTM C1513 screws of the same size and head style/dimension are prescribed in IRC Sections R505.2.5, R603.2.5 and R804.2.5 (2012 and 2009 IRC Sections R505.2.4, R603.2.4 and R804.2.4) for attachment of wood sheathing panels to cold-formed steel.

The PWH screws described in Section 3.4 and the SWNH, SFH and RFH screws described in Section 3.5 may be used in shear walls and diaphragms consisting of wood structural panels fastened to cold-formed steel framing, where ASTM C1513 screws of the same size and head style/dimension are prescribed in the code. Under the 2021 IBC, refer to Sections B5.2.2.3.3 and B5.4.2 of AISI S240 and Sections E1 and F2 of AISI S400, which are referenced in 2021 IBC Section 2211. Under the 2018 IBC, refer to Sections B5.2.2.3.3 and B5.4 of AISI S240 and Sections E1 and F2 of AISI S400, which are referenced in 2018 IBC Section 2211. Under the 2015, 2012 and 2009 IBC, refer to Sections C2.2.2 and D2.2 of AISI S213, which is referenced in Section 2211 of the 2015 and 2012 IBC, and in Section 2210 of the 2009 IBC.

4.1.3 Engineered Design: For use of the SWNH, SFH, RFH and SPWH self-drilling screws in engineered design, allowable screw strengths are shown in Table 2 and allowable pull-out strengths for common thicknesses of cold-formed steel are shown in Table 3. Instructions on how to calculate design strengths for use in Load and Resistance Factor Design (LRFD) are found in the footnotes of Tables

2 and 3. These values are intended to aid the designer in meeting the requirements of IBC Section 1604.2.

Determination of the suitability of a particular screw in this report for the specific application is the responsibility of the registered design professional and is outside the scope of this report.

The registered design professional is responsible for determining the available strengths for the connection, considering all applicable limit states such as pull-over or pull-through, tilting and bearing, etc., and for considering serviceability issues, such as fastener slip.

The registered design professional is responsible for determining the required spacing, edge distance and end distance for the fasteners, based on the characteristics of the steel base material and the attached building material. For the supporting cold-formed steel base material, screws must be spaced a minimum of 3 times the nominal diameter of the screw and must be located not less than 1.5 times the diameter of the screw from any end or edge of the cold-formed steel base material. The required edge distance, end distance and spacing for the attached building material is outside the scope of this report.

4.2 Installation:

Installation of the Senco self-drilling and self-piercing screws must be in accordance with the manufacturer's published installation instructions and this report. The manufacturer's published installation instructions must be available at the jobsite at all times during installation.

The screws must be installed perpendicular to the work surface using a variable speed screw driving tool set to not exceed 2,500 rpm. The screw must penetrate through the supporting steel with a minimum of three threads protruding past the back side of the supporting steel.

5.0 CONDITIONS OF USE

The Senco self-drilling and self-piercing screws described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1** Screws must be installed in accordance with the manufacturer's published installation instructions and this report. In the event of a conflict between this report and the manufacturer's published installation instructions, the more restrictive requirement governs.
- 5.2** The Senco PBH self-drilling screws, PBH self-piercing screws and PWH self-drilling screws described in Sections 3.2, 3.3 and 3.4 have only been evaluated for compliance with ASTM C954, ASTM C1002 and ASTM C1513 (respectively), quality control and for prescriptive design described in Sections 4.1.2.1, 4.1.2.2 and 4.1.2.3, respectively. Use of these screws in engineered design is outside the scope of this report.
- 5.3** The Senco SWNH, SFH and RFH screws described in Section 3.5 and the SPWH screws described in Section 3.6 have only been evaluated for fastener strength, compliance with ASTM C1513, quality control and pull-out strength. Evaluation of other applicable limit states for connections of building materials to the steel base is outside the scope of this report.
- 5.4** Design of the connection of the attached material to the steel base material, taking into account the properties of the attached material, must comply with the applicable requirements of the IBC, and be justified to the satisfaction of the code official.
- 5.5** The screws are manufactured under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with ICC-ES Acceptance Criteria for Self-Drilling Tapping Screws Used to Attach Miscellaneous Building Materials to Steel Base Material (AC500), dated October 2017 (editorially revised January 2021).

7.0 IDENTIFICATION

7.1 Senco self-drilling screws are marked with a “D” on the top of the heads, as shown in Figures 1 through 8. Packages of Senco self-drilling and self-piercing screws are labeled with the report holder’s name, the fastener brand name (Senco) and model number, the nominal screw size and length, the point style and the evaluation report number (ESR-4826).

7.2 The report holder’s contact information is the following:

KYOCERA SENCO INDUSTRIAL TOOLS, INC.
8450 BROADWELL ROAD
CINCINNATI, OHIO 45244
(800) 543-4596
www.senco.com

TABLE 1A—SENCO SELF-DRILLING SCREWS (ASTM C954) FOR PRESCRIPTIVE CONNECTIONS OF GYPSUM BOARD PRODUCTS TO COLD-FORMED STEEL

| DESIGNATION ¹ (Nom. size – tpi, Head style designation) | DESCRIPTION (Nom. size x length) | SENCO MODEL NUMBER ³ | DRIVE RECESS | HEAD DIAMETER (in.) | NOMINAL DIAMETER (in.) | DRILL POINT (Number) | DRILL CAPACITY (in.) | | MINIMUM REQUIRED PROTRUSION LENGTH (in.) | COATING ² |
|---|--|---------------------------------------|-----------------|---------------------------|------------------------------|----------------------------|----------------------------|-------|---|---|
| | | | | | | | Min. | Max. | | |
| #6-20 x Bugle PBH | 6 x 1 | 06C100XY | Phillips | 0.324 | 0.138 | #2 | 0.035 | 0.090 | 0.303 | Clear Zinc, Grey Phosphate or Exterior |
| | 6 x 1 ¹ / ₄ | 06C125XY | Phillips | 0.324 | 0.138 | #2 | 0.035 | 0.090 | 0.303 | |
| | 6 x 1 ⁵ / ₈ | 06C162XY | Phillips | 0.324 | 0.138 | #2 | 0.035 | 0.090 | 0.303 | |
| | 6 x 2 | 06C200XY | Phillips | 0.324 | 0.138 | #2 | 0.035 | 0.090 | 0.303 | |
| #8-18 x Bugle (PBH) | 8 x 2 ¹ / ₂ | 08C250XY | Phillips | 0.324 | 0.163 | #2 | 0.035 | 0.090 | 0.303 | |

For SI: 1 inch = 25.4 mm.

¹Refer to Section 3.2 and Figure 1 for head configuration abbreviations.

²For coating abbreviations, Clear Zinc = Fe/Zn 3A per ASTM F1941; Exterior = Fe/Zn 8AS per ASTM F1941; Grey Phosphate = Grade C coating per ASTM F1137.

³The letter in the X position (7th digit) denotes the coating: C = Clear Zinc, P = Grey Phosphate, W = Exterior. The letter in the Y position (8th digit) denotes the type of packaging: B = 4000 pcs box, K = 1000 pcs box, T = 1000 pcs tub.

TABLE 1B—SENCO SELF-PIERCING SCREWS (ASTM C1002) FOR PRESCRIPTIVE CONNECTIONS OF GYPSUM BOARD PRODUCTS TO COLD-FORMED STEEL

| DESIGNATION ¹ (Nom. size – tpi, Head style designation) | DESCRIPTION (Nom. size x length) | SENCO MODEL NUMBER ³ | DRIVE RECESS | HEAD DIAMETER (in.) | NOMINAL DIAMETER (in.) | POINT | PIERCING CAPACITY (in.) | | MINIMUM REQUIRED PROTRUSION LENGTH (in.) | COATING ² |
|---|--|---------------------------------------|-----------------|---------------------------|------------------------------|-------------------|-------------------------------|-------|---|---|
| | | | | | | | Min. | Max. | | |
| #6-15 x Bugle (PBH) | 6 x 1 ¹ / ₄ | 06B125XY | Phillips | 0.324 | 0.138 | Self- piercing | 0.021 | 0.036 | 0.436 | Clear Zinc, Grey Phosphate or Exterior |
| | 6 x 1 ⁵ / ₈ | 06B162XY | Phillips | 0.324 | 0.138 | Self- piercing | 0.021 | 0.036 | 0.436 | |
| | 6 x 2 | 06B200XY | Phillips | 0.324 | 0.138 | Self- piercing | 0.021 | 0.036 | 0.436 | |

For SI: 1 inch = 25.4 mm.

¹Refer to Section 3.3 and Figure 2 for head configuration abbreviations.

²For coating abbreviations, Clear Zinc = Fe/Zn 3A per ASTM F1941; Exterior = Fe/Zn 8AS per ASTM F1941; Grey Phosphate = Grade C coating per ASTM F1137.

³The letter in the X position (7th digit) denotes the coating: C = Clear Zinc, P = Grey Phosphate, W = Exterior. The letter in the Y position (8th digit) denotes the type of packaging: B = 4000 pcs box, K = 1000 pcs box, T = 1000 pcs tub.

TABLE 1C—SENCO SELF-DRILLING SCREWS (ASTM C1513) FOR PRESCRIPTIVE CONNECTIONS OF WOOD-BASED SHEATHING TO COLD-FORMED STEEL

| DESIGNATION ¹ (Nom. size – tpi, Head style designation) | DESCRIPTION (Nom. size x length) | SENCO MODEL NUMBER ³ | DRIVE RECESS | HEAD DIAMETER (in.) | NOMINAL DIAMETER (in.) | DRILL POINT (Number) | DRILL CAPACITY (in.) | | MINIMUM REQUIRED PROTRUSION LENGTH (in.) | COATING ² |
|---|--|---------------------------------------|-----------------|---------------------------|------------------------------|----------------------------|----------------------------|-------|---|----------------------|
| | | | | | | | Min. | Max. | | |
| #8-18 x Reduced Wafer (PWH) | 8 x 1 | 08G100CK NFDP | Phillips | 0.324 | 0.164 | #2 | 0.035 | 0.100 | 0.356 | Clear Zinc |

For **SI**: 1 inch = 25.4 mm.

¹Refer to Section 3.4 and Figure 3 for head configuration abbreviations.

²For coating abbreviations, Clear Zinc = Fe/Zn 3A per ASTM F1941.

³The 7th digit denotes the coating: C = Clear Zinc. The 8th digit denotes the type of packaging: K = 1000 pcs box.

TABLE 1D—SENCO SELF-DRILLING SCREWS FOR ENGINEERED CONNECTIONS OF MISCELLANEOUS BUILDING MATERIALS TO COLD-FORMED STEEL

| DESIGNATION ¹ (Nom. size – tpi, Head style designation) | DESCRIPTION (Nom. size x length) | SENCO MODEL NUMBER ³ | DRIVE RECESS | HEAD DIAMETER (in.) | NOMINAL DIAMETER (in.) | POINT | PIERCING CAPACITY (in.) | | MINIMUM REQUIRED PROTRUSION LENGTH (in.) | COATING ² |
|---|--|---------------------------------------|-----------------|---------------------------|------------------------------|-------|-------------------------------|-------|---|----------------------|
| | | | | | | | Min. | Max. | | |
| #8-18 Pan with Washer (SPWH) | 8 x 2 | 08X200CKA DDS | Square | 0.352 | 0.164 | #2 | 0.035 | 0.100 | 0.379 | Clear Zinc |
| | 8 x 1 ¹ / ₄ | 08X125CKA DDS | Square | 0.352 | 0.164 | #2 | 0.035 | 0.100 | 0.379 | |

For **SI**: 1 inch = 25.4 mm.

¹Refer to Section 3.5 and Figure 4 for head configuration abbreviations.

²For coating abbreviations, Clear Zinc = Fe/Zn 3A per ASTM F1941.

³The 7th digit denotes the coating: C = Clear Zinc. The 8th digit denotes the type of packaging: K = 1000 pcs box.

TABLE 1E—SENCO SELF-DRILLING SCREWS FOR PRESCRIPTIVE AND ENGINEERED CONNECTIONS OF WOOD-BASED SHEATHING TO COLD-FORMED STEEL

| DESIGNATION ¹ (Nom. size – tpi, Head style designation) | DESCRIPTION (Nom. size x length) | SENCO MODEL NUMBER ³ | DRIVE RECESS | HEAD DIAMETER (in.) | NOMINAL DIAMETER (in.) | DRILL POINT (Number) | DRILL CAPACITY (in.) | | MINIMUM REQUIRED PROTRUSION LENGTH (in.) | COATING ² |
|---|--|------------------------------------|-----------------|---------------------------|------------------------------|----------------------------|----------------------------|-------|---|----------------------|
| | | | | | | | Min. | Max. | | |
| #8-16 x Wafer + Nibs (SWNH) | 8 x 1 ⁵ / ₈ | 08G162CTWFWS | Square | 0.360 | 0.164 | #3 | 0.035 | 0.158 | 0.542 | Clear Zinc |
| | 8 x 2 | 08G200WTWFWS | Square | 0.360 | 0.164 | #3 | 0.035 | 0.158 | 0.542 | Exterior |
| | 8 x 2 ¹ / ₂ ⁽⁴⁾ | 08G250WWK | Square | 0.360 | 0.164 | #3 | 0.035 | 0.124 | 0.542 | Exterior |
| #8-18 x Flat (SFH) | 8 x 2 | 08G200CKLFPS | Square | 0.320 | 0.164 | #2 | 0.035 | 0.158 | 1.072 | Clear Zinc |
| #10-16 x Wafer + Nibs (SWNH) | 10 x 1 ⁵ / ₈ | 10G162CTWFWS | Square | 0.355 | 0.190 | #4 | 0.059 | 0.260 | 0.620 | Clear Zinc |
| #12-14 x Flat (RFH) | 12 x 1 ³ / ₄ | 12G175YKLFAX | Rex | 0.355 | 0.216 | #3 | 0.079 | 0.260 | 0.765 | Yellow Zinc |
| | 12 x 2 | 12G200YKLF CX | Rex | 0.355 | 0.216 | #5 | 0.079 | 0.260 | 0.765 | Yellow Zinc |
| | 12 x 2 ¹ / ₂ | 12G250YKLF CX | Rex | 0.355 | 0.216 | #5 | 0.079 | 0.260 | 0.765 | Yellow Zinc |

For **SI**: 1 inch = 25.4 mm.

¹Refer to Section 3.6 and Figures 5 through 8 for head configuration abbreviations.

²For coating abbreviations, Clear Zinc = Fe/Zn 3A per ASTM F1941; Yellow Zinc = Fe/Zn 3C per ASTM F1941; Exterior = Fe/Zn 8AS per ASTM F1941.

³The 7th digit denotes the coating: C = Clear Zinc, W = Exterior, Y = Yellow Zinc. The 8th digit denotes the type of packaging: K = 1000 pcs box, T = 1000 pcs tub; except for model number 08G250WWK where the 7th digit denotes the coating and the 9th digit denotes the type of packaging.

⁴Screw with intermediate smooth shank, see Figure 6.

TABLE 2—SCREW STRENGTH^{1,2}

| SCREW DESIGNATION | NOMINAL DIAMETER (in.) | NOMINAL SCREW STRENGTH DETERMINED BY TESTING | | ALLOWABLE SCREW STRENGTH | |
|--------------------------------|------------------------|--|------------------------------|------------------------------------|----------------------------------|
| | | Tension, P _{ts} (lbf) | Shear, P _{ss} (lbf) | Tension (P _{ts} /Ω) (lbf) | Shear (P _{ss} /Ω) (lbf) |
| #8-16 x Wafer + Nibs (SWNH) | 0.164 | 2869 | 1856 | 956 | 618 |
| #8-18 x Pan with Washer (SPWH) | 0.164 | 1927 | 1377 | 642 | 459 |
| #8-18 x Flat (SFH) | 0.164 | 2317 | 1495 | 772 | 498 |
| #10-16 x Wafer + Nibs (SWNH) | 0.190 | 3095 | 1981 | 1031 | 660 |
| #12-14 x Flat (RFH) | 0.216 | 3310 | 2595 | 1103 | 864 |

For SI: 1 inch = 25.4 mm, 1 lbf = 4.4 N, 1 ksi = 6.89 MPa.

¹See Section 4.1.3 for fastener spacing, edge and end distance requirements.

²To calculate LRFD values; multiply the nominal fastener strengths by the LRFD Φ factor of 0.5.

TABLE 3—ALLOWABLE TENSILE PULL-OUT LOADS (P_{NOT}/Ω), pounds-force^{1,2,3}

| SCREW DESIGNATION | NOMINAL DIAMETER (in.) | STEEL F _U =45 Ksi | | STEEL F _U =55 Ksi | | STEEL F _U =65 Ksi | | |
|--------------------------------|------------------------|---|-------|------------------------------|-------|------------------------------|-------|-------|
| | | Design Thickness of Member Not in Contact with the Screw Head (in.) | | | | | | |
| | | 0.041 | 0.050 | 0.041 | 0.050 | 0.062 | 0.075 | 0.104 |
| #8-16 x Wafer + Nibs (SWNH) | 0.164 | 73 | 100 | 73 | 129 | 186 | 186 | 368 |
| #8-18 x Pan with Washer (SPWH) | 0.164 | 88 | 127 | 91 | 128 | 183 | 237 | 382 |
| #8-18 x Flat (SFH) | 0.164 | 97 | 110 | 97 | 142 | 225 | 250 | 440 |
| #10-16 x Wafer + Nibs (SWNH) | 0.190 | 93 | 129 | 93 | 166 | 215 | 262 | 430 |
| #12-14 x Flat (RFH) | 0.216 | 74 | 74 | 93 | 95 | 183 | 238 | 332 |

For SI: 1 inch = 25.4 mm, 1 pound-force = 4.4 N, 1 ksi = 6.89 MPa.

¹Nominal load values are based upon laboratory testing in accordance with AISI S905.

²The allowable pull-out capacity for intermediate member thicknesses can be determined by interpolating within the values in the table for the applicable steel tensile strength.

³To calculate LRFD values, multiply values in table by the ASD safety factor of 3.0 and multiply again with the LRFD Φ factor of 0.5.



FIGURE 1—PHILLIPS BUGLE HEAD (PBH) SELF-DRILLING SCREW

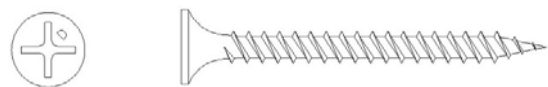


FIGURE 2—PHILLIPS BUGLE HEAD (PBH) SELF-PIERCING SCREW



FIGURE 3—PHILLIPS REDUCED WAFER HEAD (PWH) SELF-DRILLING SCREW

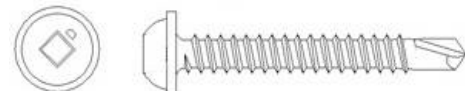


FIGURE 4—SQUARE PAN WITH WASHER HEAD (SPWH) SELF-DRILLING SCREW



FIGURE 5—1 5/8" AND 2" LONG SQUARE WAFER WITH NIBS HEAD (SWNH) SELF-DRILLING SCREW



FIGURE 6—2 1/2" LONG SQUARE WAFER WITH NIBS HEAD (SWNH) SELF-DRILLING SCREW

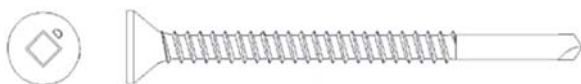


FIGURE 7—SQUARE FLAT HEAD (SFH) SELF-DRILLING SCREW

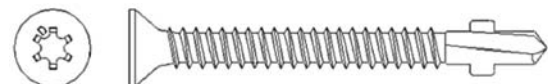


FIGURE 8—REX FLAT HEAD (RFH) SELF-DRILLING SCREW

DIVISION: 05 00 00—METALS

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REPORT HOLDER:

KYOCERA SENCO INDUSTRIAL TOOLS, INC.

EVALUATION SUBJECT:

SENCO SELF-DRILLING AND SELF-PIERCING SCREWS – MISCELLANEOUS MATERIALS TO STEEL

1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that Senco self-drilling and self-piercing screws, described in ICC-ES evaluation report ESR-4826 have also been evaluated for compliance with the codes noted below.

Applicable code edition(s):

- 2019 *California Building Code* (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

- 2019 *California Residential Code* (CRC)

2.0 CONCLUSIONS**2.1 CBC:**

The Senco self-drilling and self-piercing screws, described in Sections 2.0 through 7.0 of the evaluation report ESR-4826, comply with CBC Chapter 22, provided the design and installation are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 22, 23 and 25, as applicable.

2.1.1 OSHPD: The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

2.1.2 DSA: The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

2.2 CRC:

The Senco self-drilling and self-piercing screws, described in Sections 2.0 through 7.0 of the evaluation report ESR-4826, comply with CRC Chapters 3, 5, 6, 7 and 8, provided the design and installation are in accordance with the 2018 *International Residential Code*® (IRC) provisions noted in the evaluation report and the additional requirements of the CRC Chapters, as applicable.

This supplement expires concurrently with the evaluation report, reissued June 2022.