**THE NRCA ROOFING MANUAL**

**CONSTRUCTION DETAIL C-2**

**COPING**
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

**ANSI/SPRI ES-1**
**TESTED RESISTANCE**
- OUTWARD: 190 LBS./SQ. FT.
- UPWARD: 310 LBS./SQ. FT.

**ITS-1A**

**FABRICATION**

- 24 GAUGE (0.024" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)
- 22 GAUGE (0.030" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

**INSTALLATION**

- CONTINUOUS CLEAT
- 1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
- CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
- 1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.
COPING
- 0.040" ALUMINUM
- 0.040" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
150 LBS./SQ. FT. 250 LBS./SQ. FT.

8/28/18

FABRICATION

0.040" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

INSTALLATION

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
THE NRCA ROOFING MANUAL
CONSTRUCTION DETAIL C-2

COPING
- 0.040" ALUMINUM
- 0.040" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND
  GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
150 LBS./SQ. FT. 250 LBS./SQ. FT.

ITS-2A
8/28/18

FABRICATION

INSTALLATION

COPING
CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL
ROOFING NAIL AT 6" O.C.

1 1/2" LONG GALVANIZED
STEEL HEX HEAD SCREW
WITH WASHER AT 18" O.C.

CONTINUOUSLY HAND CRIMP
HEM OVER CLEAT

0.040" THICK ALUMINUM
CONFORMING TO ASTM B209
(3003 OR 3105)

5" MAX

8" MAX

3 1/4

1 1/2

3/4

135°
**COPING**
- 20 OZ. COPPER
- 24 GA. STAINLESS STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

**ANSI/SPRI ES-1 TESTED RESISTANCE**
- OUTWARD: 135 LBS./SQ. FT.
- UPWARD: 220 LBS./SQ. FT.

**FABRICATION**
- 20 OZ. COPPER (0.027" THICK) CONFORMING TO ASTM B370
- 24 GAUGE (0.024" THICK) STAINLESS STEEL CONFORMING TO ASTM A240

**INSTALLATION**
- 1 1/4" LONG STAINLESS STEEL ROOFING NAIL AT 6" O.C.
- 1 1/2" LONG STAINLESS STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.
- CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
COPING
- 20 OZ. COPPER
- 24 GA. STAINLESS STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
135 LBS./SQ. FT. 220 LBS./SQ. FT.

FABRICATION

20 OZ. COPPER (0.027" THICK)
CONFORMING TO ASTM B370

24 GAUGE (0.024" THICK) STAINLESS STEEL CONFORMING TO ASTM A240

INSTALLATION

COPING

CONTINUOUS CLEAT

1 1/4" LONG STAINLESS STEEL ROOFING NAIL AT 6" O.C.

1 1/2" LONG STAINLESS STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
**COPING**
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

**ANSI/SPRI ES-1 TESTED RESISTANCE**
- OUTWARD: 265 LBS./SQ. FT.
- UPWARD: 440 LBS./SQ. FT.

**FABRICATION**
- 24 GAUGE (0.024" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)
- 22 GAUGE (0.030" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

**INSTALLATION**
- COPING
- CONTINUOUS CLEAT
- 1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
- 1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.
- CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
**COPING**
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

**ANSI/SPRI ES-1 TESTED RESISTANCE**
- OUTWARD: 265 LBS./SQ. FT.
- UPWARD: 440 LBS./SQ. FT.

**FABRICATION**

24 GAUGE (0.024" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

22 GAUGE (0.030" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

**INSTALLATION**

- COPING
- CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
THE NRCA ROOFING MANUAL
CONSTRUCTION DETAIL C-3

COPING
• 24 GA. STEEL
• 22 GA. STEEL CLEAT
• CONTINUOUS FRONT FACE CLEAT AND
  GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE

OUTWARD UPWARD
214 LBS./SQ. FT. 350 LBS./SQ. FT.

FABRICATION

24 GAUGE (0.024" THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR ASTM A240
TYPE 302 OR TYPE 304
(STAINLESS STEEL)

22 GAUGE (0.030" THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR ASTM
A240 TYPE 302 OR TYPE 304
(STAINLESS STEEL)

INSTALLATION

1 1/4" LONG GALVANIZED STEEL
ROOFING NAIL AT 12" O.C.

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL
ROOFING NAIL AT 6" O.C.

1 1/2" LONG GALVANIZED STEEL
HEX HEAD SCREW WITH WASHER
AT 18" O.C.

CONTINUOUSLY HAND CRIMP HEM
OVER CLEAT
Coping

- 22 GA. STEEL
- 20 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND
  GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE

OUTWARD UPWARD
175 LBS./SQ. FT. 290 LBS./SQ. FT.

8/28/18

Fabrication

22 GAUGE (0.030" THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR ASTM
A240 TYPE 302 OR TYPE 304
(STAINLESS STEEL)

20 GAUGE (0.036" THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR ASTM
A240 TYPE 302 OR TYPE 304
(STAINLESS STEEL)

Installation

- 1 1/4" LONG GALVANIZED STEEL
ROOFING NAIL AT 6" O.C.

- 1 1/2" LONG GALVANIZED STEEL
HEX HEAD SCREW WITH WASHER
AT 18" O.C.

- CONTINUOUSLY HAND CRIMP HEM
OVER CLEAT
COPING
- 22 GA. STEEL
- 20 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
175 LBS./SQ. FT. 290 LBS./SQ. FT.

ITS-5A
8/28/18

FABRICATION

1 1¼" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
1 1½" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.
CONTINUOUSLY HAND CRIMP HEM OVER CLEAT

INSTALLATION
**COPING**
- 0.040" ALUMINUM
- 0.040" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

**ANSI/SPRI ES-1 TESTED RESISTANCE**
- OUTWARD: 95 LBS./SQ. FT.
- UPWARD: 160 LBS./SQ. FT.

**FABRICATION**

**INSTALLATION**

- COPING
- CONTINUOUS CLEAT
- 1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
- 1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.
- CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
COPING
- 0.040" ALUMINUM
- 0.050" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
202 LBS./SQ. FT. 330 LBS./SQ. FT.

12" MAX

0.040" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

0.050" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

FABRICATION

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 12" O.C.

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT

INSTALLATION
**COPING**
- 0.050" ALUMINUM
- 0.050" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

**ANSI/SPRI ES-1 TESTED RESISTANCE**
- OUTWARD: 180 LBS./SQ. FT.
- UPWARD: 300 LBS./SQ. FT.

**FABRICATION**

**INSTALLATION**

- 1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
- 1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.

- CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
COPING
- 0.050" ALUMINUM
- 0.050" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
180 LBS./SQ. FT. 300 LBS./SQ. FT.

ITS-7A
8/28/18

FABRICATION

COPING
CONTINUOUS CLEAT
1 1/4" LONG GALVANIZED STEEL
ROOFING NAIL AT 6" O.C.
1 1/2" LONG GALVANIZED STEEL
HEX HEAD SCREW WITH WASHER
AT 18" O.C.
CONTINUOUSLY HAND CRIMP HEM
OVER CLEAT

INSTALLATION
COPING
- 16 OZ. COPPER
- 24 GA. STAINLESS STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
75 LBS./SQ. FT. 125 LBS./SQ. FT.

FABRICATION

16 OZ. (0.022" THICK) COPPER CONFORMING TO ASTM B370

24 GAUGE (0.024" THICK) STAINLESS STEEL CONFORMING TO ASTM A240

INSTALLATION

COPING

CONTINUOUS CLEAT

1 1/4" LONG STAINLESS STEEL ROOFING NAIL AT 6" O.C.

1 1/2" LONG STAINLESS STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
COPING

- 16 OZ. COPPER
- 24 GA. STAINLESS STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
75 LBS./SQ. FT. 125 LBS./SQ. FT.

16 OZ. (0.022" THICK) COPPER CONFORMING TO ASTM B370

24 GAUGE (0.024" THICK) STAINLESS STEEL CONFORMING TO ASTM A240

FABRICATION

COPING
CONTINUOUS CLEAT

1 1/4" LONG STAINLESS STEEL ROOFING NAIL AT 6" O.C.

1 1/2" LONG STAINLESS STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT

INSTALLATION
**THE NRCA ROOFING MANUAL**

**CONSTRUCTION DETAIL C-1**

**COPING**
- 20 OZ. COPPER
- 24 GA. STAINLESS STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

**ANSI/SPRI ES-1**
**TESTED RESISTANCE**
- OUTWARD: 150 LBS./SQ. FT.
- UPWARD: 250 LBS./SQ. FT.

**ITS-9**

8/28/18

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**FABRICATION**

- 20 OZ. (0.027" THICK) COPPER CONFORMING TO ASTM B370
- 24 GAUGE (0.024" THICK) STAINLESS STEEL CONFORMING TO ASTM A240

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**INSTALLATION**

- COPING
- CONTINUOUS CLEAT
- 1 1/4" LONG STAINLESS STEEL ROOFING NAIL AT 6" O.C.
- 1 1/2" LONG STAINLESS STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.
- CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
COPING
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE AND BACK FACE CLEAT

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
145 LBS./SQ. FT. 240 LBS./SQ. FT.

FABRICATION

INSTALLATION
COPING
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE AND BACK FACE CLEAT

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
145 LBS./SQ. FT. 240 LBS./SQ. FT.

ITS-10A 8/28/18

FABRICATION

24 GAUGE (0.024" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

22 GAUGE (0.030" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

INSTALLATION

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
COPING
- 0.040" ALUMINUM
- 0.050" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE AND BACK FACE CLEAT

ANSI/SPRI ES-1 TESTED RESISTANCE
OUTWARD UPWARD
145 LBS./SQ. FT.  240 LBS./SQ. FT.

8/28/18

FABRICATION

INSTALLATION

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
COPING
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE AND BACK FACE CLEAT

24 GAUGE (0.024" THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR ASTM A240
TYPE 302 OR TYPE 304
(STAINLESS STEEL)

22 GAUGE (0.030" THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR ASTM A240
TYPE 302 OR TYPE 304
(STAINLESS STEEL)

FABRICATION

INSTALLATION
FABRICATION

COPING

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT

INSTALLATION
COPING
- 0.050" ALUMINUM
- 0.063" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE AND BACK FACE CLEAT

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
120 LBS./SQ. FT. 200 LBS./SQ. FT.

FABRICATION

INSTALLATION
**COPING**
- 0.050" ALUMINUM
- 0.063" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE AND BACK FACE CLEAT

**ANSI/SPRI ES-1 TESTED RESISTANCE**
- OUTWARD: 120 LBS./SQ. FT.
- UPWARD: 200 LBS./SQ. FT.

**FABRICATION**
- 0.050" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)
- 0.063" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

**INSTALLATION**
- 1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
- CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
COPING WITH FLAT DRIP

- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
235 LBS./SQ. FT. 390 LBS./SQ. FT.

ITS-14A
8/28/18

FABRICATION

24 GAUGE (0.024" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

22 GAUGE (0.030" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

INSTALLATION

COPING

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
FABRICATION

INSTALLATION
**FABRICATION**

- **COPING WITH FLAT DRIP**
  - 0.040" ALUMINUM
  - 0.040" ALUMINUM CLEAT
  - CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

- **ANSI/SPRI ES-1 TESTED RESISTANCE**
  - OUTWARD: 225 LBS./SQ. FT.
  - UPWARD: 400 LBS./SQ. FT.

**INSTALLATION**

- COPING
- CONTINUOUS CLEAT
- 1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
- 1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.
- CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
FABRICATION

COPING
CONTINUOUS CLEAT
1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.
CONTINUOUSLY HAND CRIMP HEM OVER CLEAT

INSTALLATION
FABRICATION

INSTALLATION
COPING WITH FLAT DRIP
- 0.040" ALUMINUM
- 0.050" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
170 LBS./SQ. FT. 280 LBS./SQ. FT.

ITS-17A
8/28/18

FABRICATION

INSTALLATION
COPING WITH FLAT DRIP
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
OUTWARD UPWARD
95 LBS./SQ. FT. 160 LBS./SQ. FT.

FABRICATION

INSTALLATION

24 GAUGE (0.024" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

22 GAUGE (0.030" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

COPING
CONTINUOUS CLEAT
1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.
CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
**COPING WITH FLAT DRIP**
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

**ANSI/SPRI ES-1 TESTED RESISTANCE**
- OUTWARD: 95 LBS./SQ. FT.
- UPWARD: 160 LBS./SQ. FT.

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**FABRICATION**

- 24 GAUGE (0.024" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

- 22 GAUGE (0.030" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

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**INSTALLATION**

- COPING
- CONTINUOUS CLEAT
- 1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
- 1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.
- CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
COPING WITH FLAT DRIP

- 0.050" ALUMINUM
- 0.063" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE

OUTWARD UPWARD
90 LBS./SQ. FT. 150 LBS./SQ. FT.

ITS-19
8/28/18

FACTORATION

24" MAX

5" MAX

0.050" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

0.063" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

INSTALLATION

COPING

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
FABRICATION

INSTALLATION
RAISED PERIMETER EDGE (FASCIA CAP)

- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

24 GAUGE (0.024" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

22 GAUGE (0.030" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

FABRICATION

INSTALLATION

1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.

RAISED PERIMETER EDGE (FASCIA CAP)

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
RAISED PERIMETER EDGE (FASCIA CAP)
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1 TESTED RESISTANCE
170 LBS./SQ. FT.

24 GAUGE (0.024" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

22 GAUGE (0.030" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

FABRICATION

1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.

RAISED PERIMETER EDGE (FASCIA CAP)

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT

INSTALLATION
RAISED PERIMETER EDGE
(FASCIA CAP)
- 0.040" ALUMINUM
- 0.040" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
140 LBS./SQ. FT.

FABRICATION

1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.
RAISED PERIMETER EDGE (FASCIA CAP)
CONTINUOUS CLEAT
1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
CONTINUOUSLY HAND CRIMP HEM OVER CLEAT

INSTALLATION
RAISED PERIMETER EDGE
(FASCIA CAP)
- 0.040" ALUMINUM
- 0.050" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
230 LBS./SQ. FT.

8/28/18

FABRICATION

0.040" THICK ALUMINUM
CONFORMING TO ASTM B209
(3003 OR 3105)

0.050" THICK ALUMINUM
CONFORMING TO ASTM B209
(3003 OR 3105)

INSTALLATION

1 1/2" LONG GALVANIZED
STEEL HEX HEAD SCREW
WITH WASHER AT 18" O.C.

RAISED PERIMETER
EDGE (FASCIA CAP)

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED
STEEL ROOFING NAIL AT
6" O.C.

CONTINUOUSLY HAND
CRIMP HEM OVER CLEAT
RAISED PERIMETER EDGE (FASCIA CAP)
- 0.040" ALUMINUM
- 0.050" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
230 LBS./SQ. FT.

FABRICATION

0.040" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

0.050" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

INSTALLATION

1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.

RAISED PERIMETER EDGE (FASCIA CAP)

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
RAISED PERIMETER EDGE (FASCIA CAP) WITH FLAT DRIP
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
250 LBS./SQ. FT.

22 GAUGE (0.030" THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR ASTM
A240 TYPE 302 OR TYPE 304
(STAINLESS STEEL)

24 GAUGE (0.024" THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR ASTM
A240 TYPE 302 OR TYPE 304
(STAINLESS STEEL)

FABRICATION

1 1/2" LONG GALVANIZED STEEL
HEX HEAD SCREW WITH
WASHER AT 18" O.C.

RAISED PERIMETER EDGE (FASCIA CAP)

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL
ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP
HEM OVER CLEAT

INSTALLATION
RAISED PERIMETER EDGE (FASCIA CAP) WITH FLAT DRIP

- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
250 LBS./SQ. FT.

ITS-23A
8/28/18

FABRICATION

22 GAUGE (0.030" THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR ASTM
A240 TYPE 302 OR TYPE 304
(STAINLESS STEEL)

24 GAUGE (0.024” THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR ASTM
A240 TYPE 302 OR TYPE 304
(STAINLESS STEEL)

INSTALLATION

1 1/2" LONG GALVANIZED STEEL
HEX HEAD SCREW WITH
WASHER AT 18" O.C.

RAISED PERIMETER EDGE (FASCIA CAP)

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL
ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP
HEM OVER CLEAT
RAISED PERIMETER EDGE (FASCIA CAP) WITH FLAT DRIP
- 0.040" ALUMINUM
- 0.040" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
330 LBS./SQ. FT.

8/28/18

FABRICATION

0.040" THICK ALUMINUM
CONFORMING TO ASTM B209
(3003 OR 3105)

1 1/2" LONG GALVANIZED STEEL
HEX HEAD SCREW WITH
WASHER AT 18" O.C.

RAISED PERIMETER EDGE (FASCIA CAP)

CONTINUOUS CLEAT

1 1/4" LONG GALVANIZED STEEL
ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP
HEM OVER CLEAT

INSTALLATION
RAISED PERIMETER EDGE (FASCIA CAP) WITH FLAT DRIP
- 0.040" ALUMINUM
- 0.040" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT AND GASKETED BACK FACE FASTENER

ANSI/SPRI ES-1
TESTED RESISTANCE
330 LBS./SQ. FT.

8/28/18

FABRICATION

INSTALLATION

1 1/2" LONG GALVANIZED STEEL HEX HEAD SCREW WITH WASHER AT 18" O.C.
RAISED PERIMETER EDGE (FASCIA CAP)
CONTINUOUS CLEAT
1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
**EMBEDDED EDGE (A-TYPE)**

- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT

**TESTED RESISTANCE**

210 LBS./SQ. FT.

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24 GAUGE (0.024" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240

TYPE 302 OR TYPE 304 (STAINLESS STEEL)

22 GAUGE (0.030" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240

TYPE 302 OR TYPE 304 (STAINLESS STEEL)

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**FABRICATION**

1 1/4" LONG GALV. STEEL ROOFING NAILS AT 3" O.C. - STAGGERED 1/2"

EMBEDDED EDGE (A-TYPE)

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT

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**INSTALLATION**
THE NRCA ROOFING MANUAL
CONSTRUCTION DETAIL EE-2

EMBEDDED EDGE (A-TYPE)
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT

ANSI/SPRI ES-1
TESTED RESISTANCE
210 LBS./SQ. FT.

ITS-25A
8/28/18

24 GAUGE (0.024" THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR
ASTM A240
TYPE 302 OR TYPE 304
(STAINLESS STEEL)

22 GAUGE (0.030"
THICK) STEEL
CONFORMING
TO ASTM A653
(GALVANIZED STEEL)
OR ASTM A240
TYPE 302 OR TYPE 304
(STAINLESS STEEL)

FABRICATION

INSTALLATION

1 1/4" LONG GALV. STEEL
ROOFING NAILS AT 3"
O.C. - STAGGERED 1/2"

EMBEDDED EDGE
(A-TYPE)

1 1/4" LONG GALVANIZED
STEEL ROOFING NAIL AT
6" O.C.

CONTINUOUSLY HAND
CRIMP HEM OVER CLEAT
**FABRICATION**

- **0.040" Thck Aluminum Conforming to ASTM B209 (3003 or 3105)**
- **0.040" Thck Aluminum Conforming to ASTM B209 (3003 or 3105)**

**INSTALLATION**

- **1 1/4" Long Galv. Steel Roofing Nails at 3" O.C. - Staggered 1/2"**
- **1 1/4" Long Galvanized Steel Roofing Nail at 6" O.C.**
- **Continuously Hand Crimp Hem over Cleat**
FABRICATION

INSTALLATION

0.040" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

0.040" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

1 1/4" LONG GALV. STEEL ROOFING NAILS AT 3" O.C. - STAGGERED 1/2"

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
EMBEDDED EDGE (A-TYPE) WITH FLAT DRIP

- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT

ANSI/SPRI ES-1 TESTED RESISTANCE
390 LBS./SQ. FT.

8/28/18

FABRICATION

1 1/4" LONG GALV. STEEL ROOFING NAILS AT 3" O.C. - STAGGERED 1/2"

EMBEDDED EDGE (A-TYPE)

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT

INSTALLATION
EMBEDDED EDGE (A-TYPE) WITH FLAT DRIP
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT

24 GAUGE (0.024" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

22 GAUGE (0.030" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

FABRICATION

INSTALLATION

1 1/4" LONG GALV. STEEL ROOFING NAILS AT 3" O.C. - STAGGERED 1/2"

EMBEDDED EDGE (A-TYPE)

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
**THE NRCA ROOFING MANUAL**

**CONSTRUCTION DETAIL EE-3**

**EMBEDDED EDGE (A-TYPE)**

- 0.040" ALUMINUM
- 0.040" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT

**ANSI/SPRI ES-1**

**TESTED RESISTANCE**

390 LBS./SQ. FT.

**ITS-29**

8/28/18

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**FABRICATION**

0.040" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

0.040" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

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**INSTALLATION**

1 1/4" LONG GALV. STEEL ROOFING NAILS AT 3" O.C. - STAGGERED 1/2"

EMBEDDED EDGE (A-TYPE)

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
EMBEDDED EDGE (A-TYPE) WITH FLAT DRIP

- 0.040" ALUMINUM
- 0.040" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT

ANSI/SPRI ES-1 TESTED RESISTANCE

390 LBS./SQ. FT.

8/28/18

FABRICATION

0.040" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

INSTALLATION

1 1/4" LONG GALV. STEEL ROOFING NAILS AT 3" O.C. - STAGGERED 1/2"

EMBEDDED EDGE (A-TYPE)

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
THE NRCA ROOFING MANUAL
CONSTRUCTION DETAIL EE-5

EMBEDDED EDGE (L-TYPE)
- 24 GA. STEEL
- 22 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT

ANSI/SPRI ES-1
TESTED RESISTANCE
210 LBS./SQ. FT.

ITS-30
8/28/18

FABRICATION

24 GAUGE (0.024" THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR
ASTM A240
TYPE 302 OR TYPE 304
(STAINLESS STEEL)

22 GAUGE (0.030"
THICK) STEEL
CONFORMING
TO ASTM A653
(GALVANIZED STEEL)
OR ASTM A240
TYPE 302 OR TYPE 304
(STAINLESS STEEL)

INSTALLATION

1 1/4" LONG GALV. STEEL
ROOFING NAILS AT 3" O.C. -
STAGGERED 1/2"

EMBEDDED EDGE

1 1/4" LONG GALVANIZED
STEEL ROOFING NAIL AT
6" O.C.

CONTINUOUSLY HAND
CRIMP HEM OVER CLEAT
**THE NRCA ROOFING MANUAL**

**CONSTRUCTION DETAIL EE-5**

**EMBEDDED EDGE (L-TYPE)**
- 0.040" ALUMINUM
- 0.050" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT

**ANSI/SPRI ES-1**

**TESTED RESISTANCE**
- 230 LBS./SQ. FT.

**ITS-31**

8/28/18

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**FABRICATION**

- 0.040" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)
- 0.050" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

**INSTALLATION**

- 1 1/4" LONG GALV. STEEL ROOFING NAILS AT 3" O.C. - STAGGERED 1/2""}

- EMBEDDED EDGE

- 1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

- CONTINUOUSLY HAND CRIMP HEM OVER CLEAT
EMBEDDED EDGE (L-TYPE)

- 24 GA. STEEL
- 20 GA. STEEL CLEAT
- CONTINUOUS FRONT FACE CLEAT

ANSI/SPRI ES-1
TESTED RESISTANCE
125 LBS./SQ. FT.

ITS-32
8/28/18

24 GAUGE (0.024" THICK) STEEL
CONFORMING TO ASTM A653
(GALVANIZED STEEL) OR
ASTM A240
TYPE 302 OR TYPE 304
(STAINLESS STEEL)

22 GAUGE (0.030"
THICK) STEEL
CONFORMING
TO ASTM A653
(GALVANIZED STEEL)
OR ASTM A240
TYPE 302 OR TYPE 304
(STAINLESS STEEL)

FABRICATION

1 1/4" LONG GALV. STEEL
ROOFING NAILS AT 3" O.C.
- STAGGERED 1/2"

EMBEDDED EDGE

1 1/4" LONG GALVANIZED
STEEL ROOFING NAIL AT
6" O.C.
**THE NRCA ROOFING MANUAL**
CONSTRUCTION DETAIL EE-5

**EMBEDDED EDGE (L-TYPE)**
- 0.050" ALUMINUM
- 0.063" ALUMINUM CLEAT
- CONTINUOUS FRONT FACE CLEAT

**ANSI/SPRI ES-1**
TESTED RESISTANCE
190 LBS./SQ. FT.

**ITS-33**
8/28/18

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**FABRICATION**

0.050" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

0.063" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

1 1/4" LONG GALV. STEEL ROOFING NAILS AT 3" O.C. - STAGGERED 1/2"

EMBEDDED EDGE

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

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**INSTALLATION**
24 GAUGE (0.024" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

22 GAUGE (0.030" THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

FABRICATION

1 1/4" LONG GALV. STEEL ROOFING NAILS AT 12" O.C.

EMBEDDED EDGE

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.
RAISED PERIMETER EDGE (FASCIA CAP)
- 24 GA. STEEL
- 22 GA. STEEL CANT

ANSI/SPRI ES-1 TESTED RESISTANCE
190 LBS./SQ. FT.

8/28/18

FABRICATION

24 GAUGE (0.024” THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

22 GAUGE (0.030” THICK) STEEL CONFORMING TO ASTM A653 (GALVANIZED STEEL) OR ASTM A240 TYPE 302 OR TYPE 304 (STAINLESS STEEL)

ADHERED SINGLE-PLY MEMBRANE OVER METAL CANT

RAISED PERIMETER EDGE (FASCIA CAP)

METAL CANT

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6” O.C.

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6” O.C.
RAISED PERIMETER EDGE (FASCIA CAP)
- 0.040 ALUMINUM
- 0.050 ALUMINUM CANT

ANSI/SPRI ES-1 TESTED RESISTANCE
200 LBS./SQ. FT.

FABRICATION

0.040" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

0.050" THICK ALUMINUM CONFORMING TO ASTM B209 (3003 OR 3105)

ADHERED SINGLE-PLY MEMBRANE OVER METAL CANT

1 1/4" LONG GALVANIZED STEEL ROOFING NAIL AT 6" O.C.

RAISED PERIMETER EDGE (FASCIA CAP)

METAL CANT

CONTINUOUSLY HAND CRIMP HEM OVER CLEAT

INSTALLATION