

**MINIMUM FASTENER PENETRATIONS AT THE DECK
(STANDARD ATTACHMENT):**

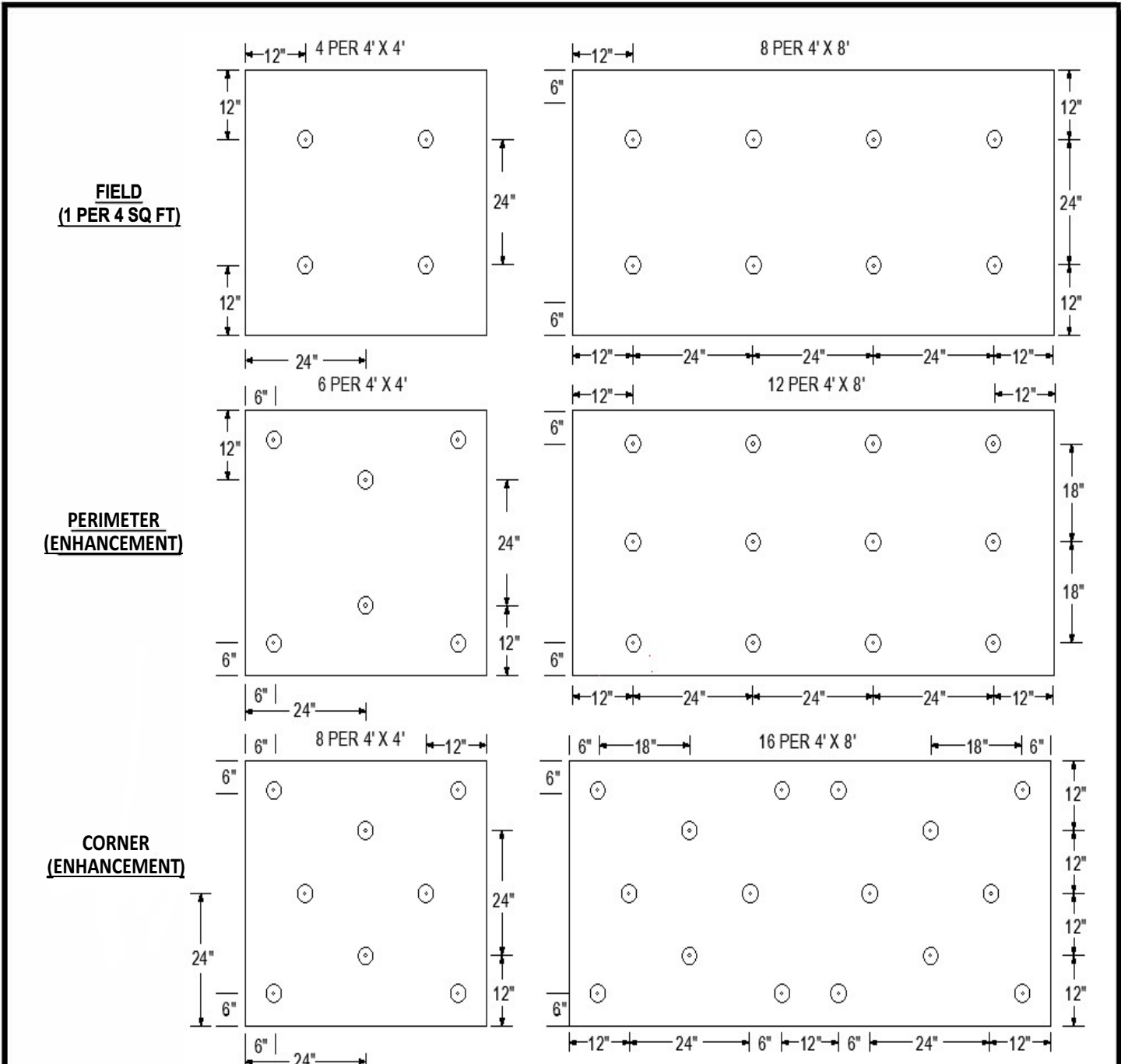
Deck Type:	Penetration Depth:	Fastener Type:
Plywood or Oriented Strand Board:	1/2" Completely through deck	IB HD #14 or IB XHD #15
1" Minimum Wood Plank:	1" into deck	IB HD #14 or IB XHD #15
Steel:	3/4" Completely through top flute	IB HD #14 or IB XHD #15
Light Weight Insulating Concrete over Steel Deck:	3/4" Completely through top flute	IB HD #14 or IB XHD #15
Light Weight Insulating Concrete:	1-1/2" into deck	Deklite
Structural Concrete:	1-1/4" into deck	CD-10 or Dekspike
Poured Gypsum:	1-1/2" into deck	Deklite
Cementitious Wood Fiber:	1-1/2" into deck	Deklite

IB Minimum Pull-Test Values for Fasteners	
7/16" OSB	275 lbs
5/8" OSB	350 lbs
1/2" Plywood	425 lbs
1" Minimum Wood Plank	450 lbs
22 ga. Steel	525 lbs
24 ga. Steel	425 lbs
Structural Concrete	800 lbs
LWIC over 24 ga. Steel	425 lbs
Poured Gypsum	300 lbs
Cementitious Wood Fiber	300 lbs

Contact IB Technical for specific project conditions where field pull-test verifications do not meet minimum fastener values.

Scale: NTS	Detail Name: Adhered TPO Membrane Seam	Detail Number: FA-T-01
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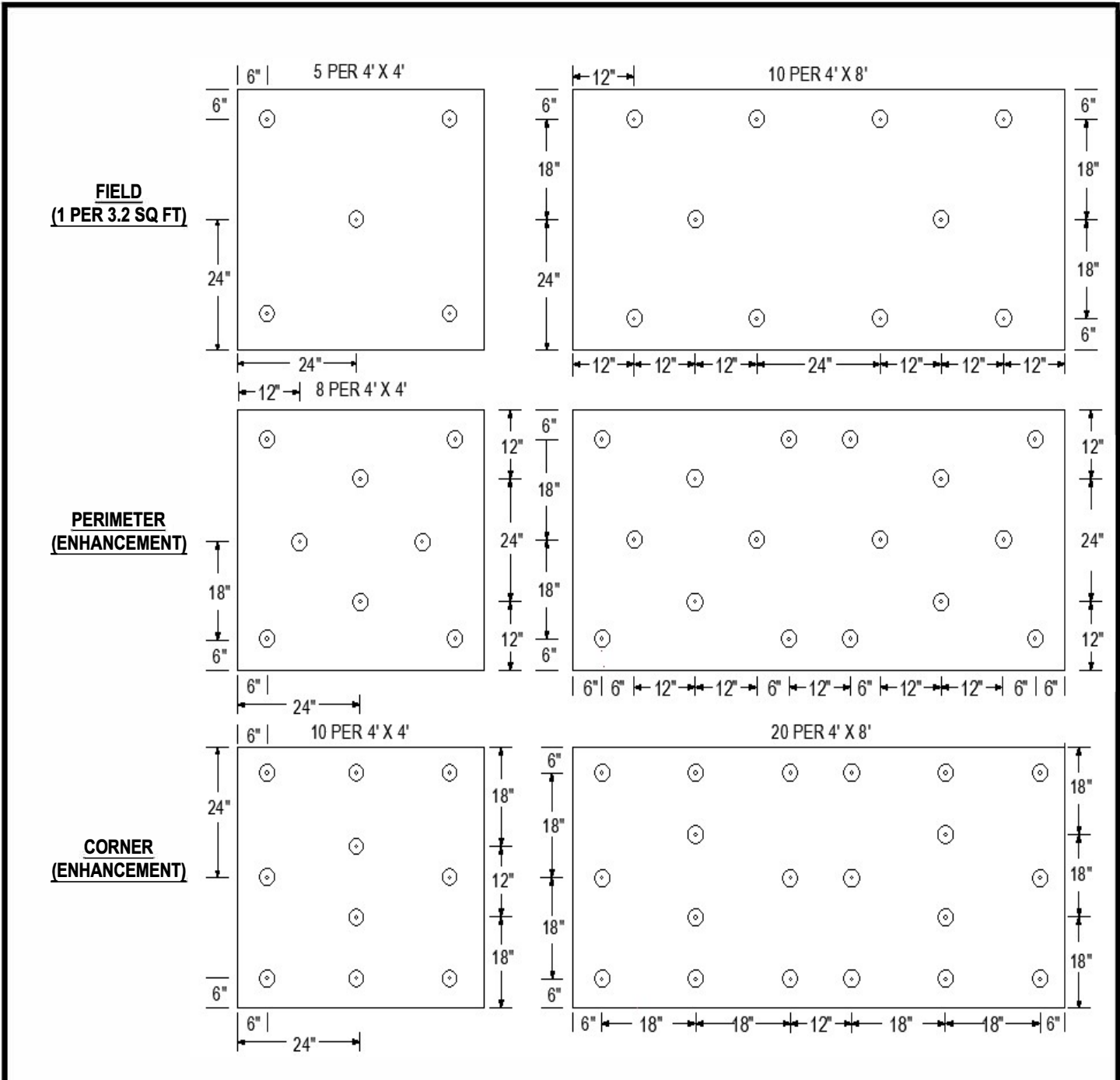


NOTES:

1. FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER AN ADHERED TPO MEMBRANE SYSTEM.
2. AN APPROVED COVER BOARD IS REQUIRED OVER FOR EPS, XPS INSULATION & OVER ANY INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED TPO MEMBRANES.

Scale: NTS	Detail Name: 1 Per 4 Fastening Pattern for Insulation/ Cover Board	Detail Number: FA-T-02
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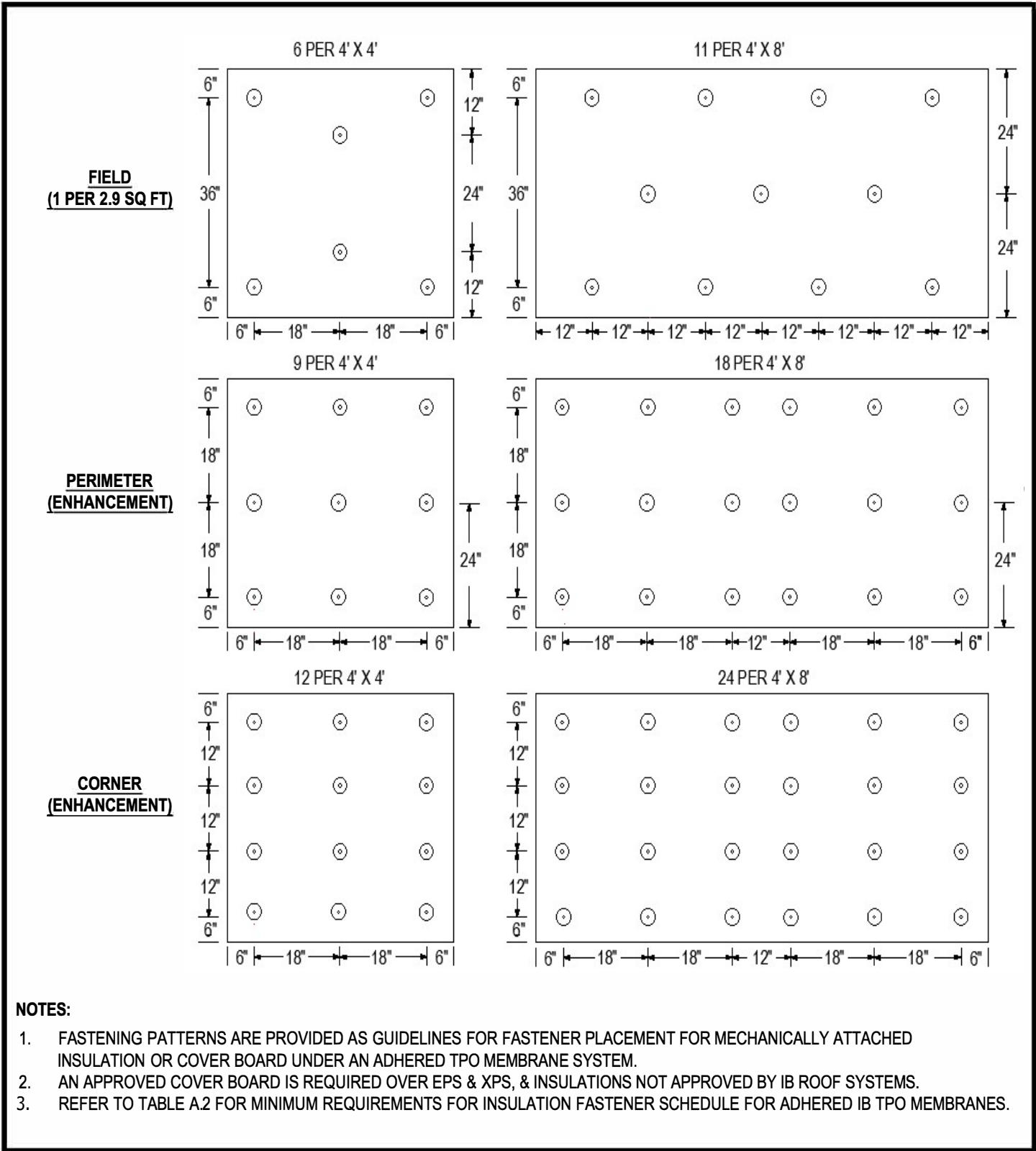


NOTES:

1. FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER AN ADHERED TPO MEMBRANE SYSTEM.
2. AN APPROVED COVER BOARD IS REQUIRED OVER EPS & XPS INSULATIONS, & INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED TPO MEMBRANES.

Scale: NTS	Detail Name: 1 Per 3.2 Fastening Patterns for Insulation/Cover Board	Detail Number: FA-T-03
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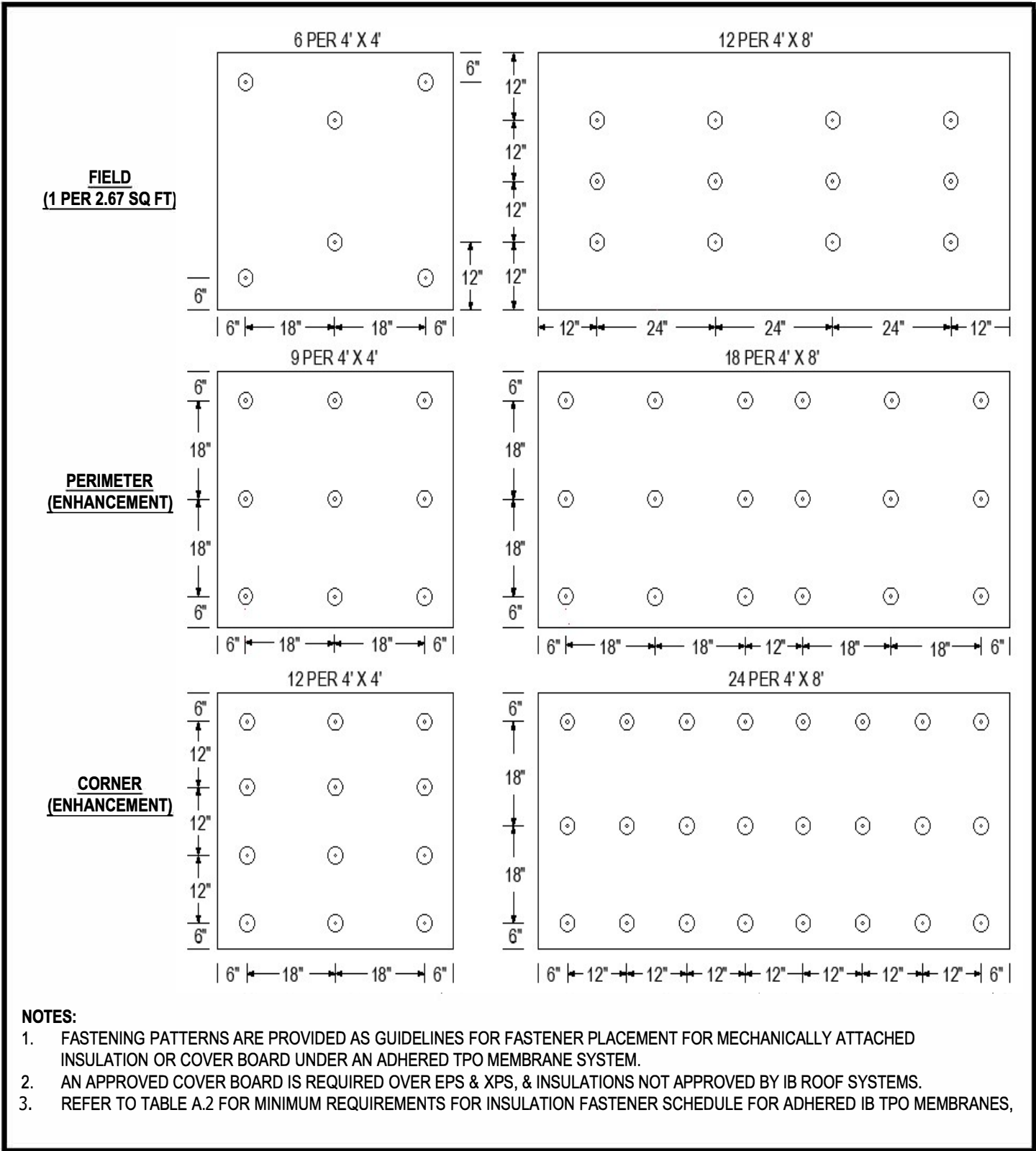


NOTES:

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2. AN APPROVED COVER BOARD IS REQUIRED OVER EPS & XPS, & INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB TPO MEMBRANES.

Scale: NTS	Detail Name: 1 Per 2.9 Fastening Patterns for Insulation/ Cover Board	Detail Number: FA-T-04
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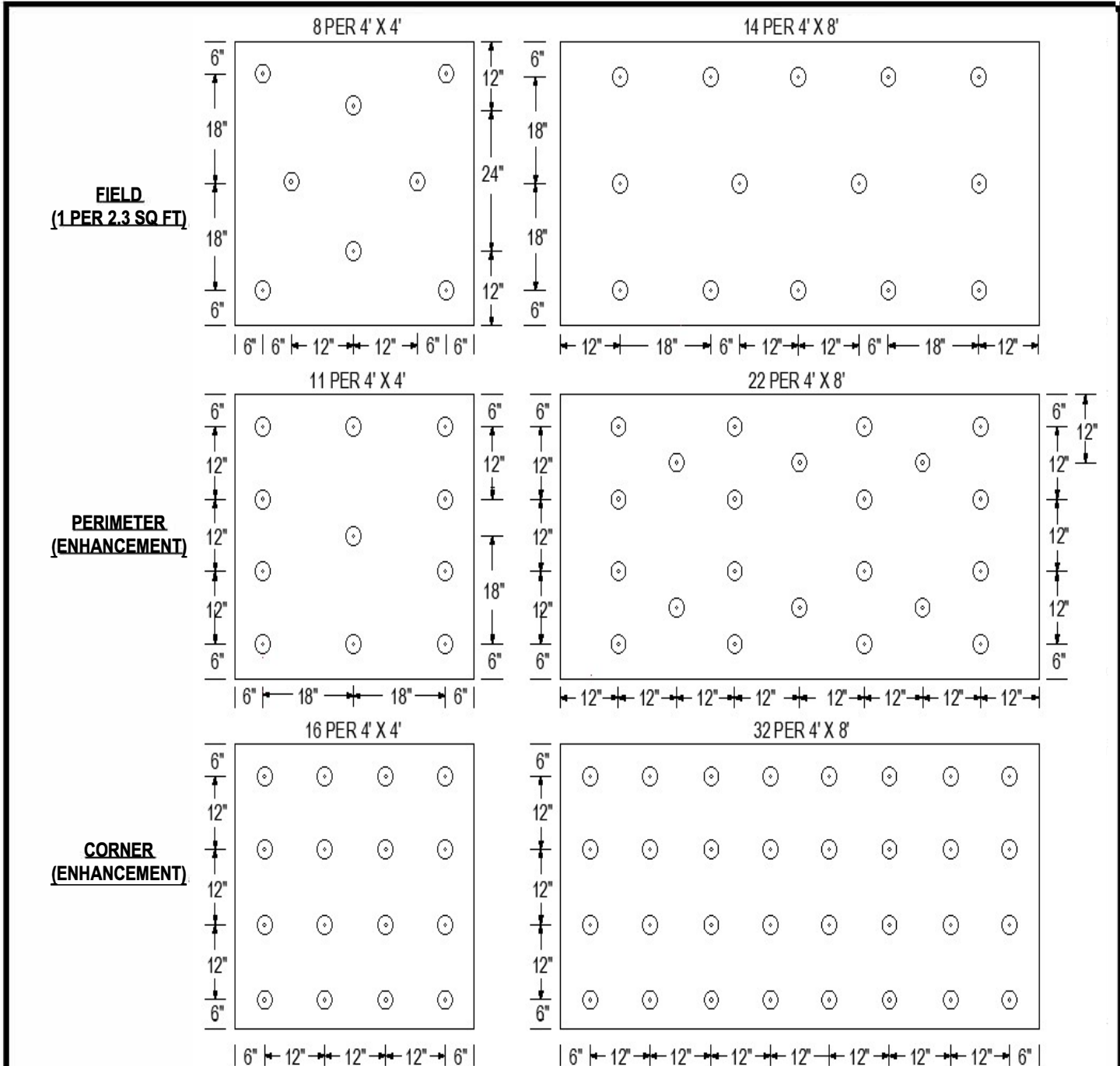


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2. AN APPROVED COVER BOARD IS REQUIRED OVER EPS & XPS, & INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB TPO MEMBRANES,

Scale: NTS	Detail Name: 1 Per 2.67 Fastening Patterns for Insulation/Cover Board	Detail Number: FA-T-05
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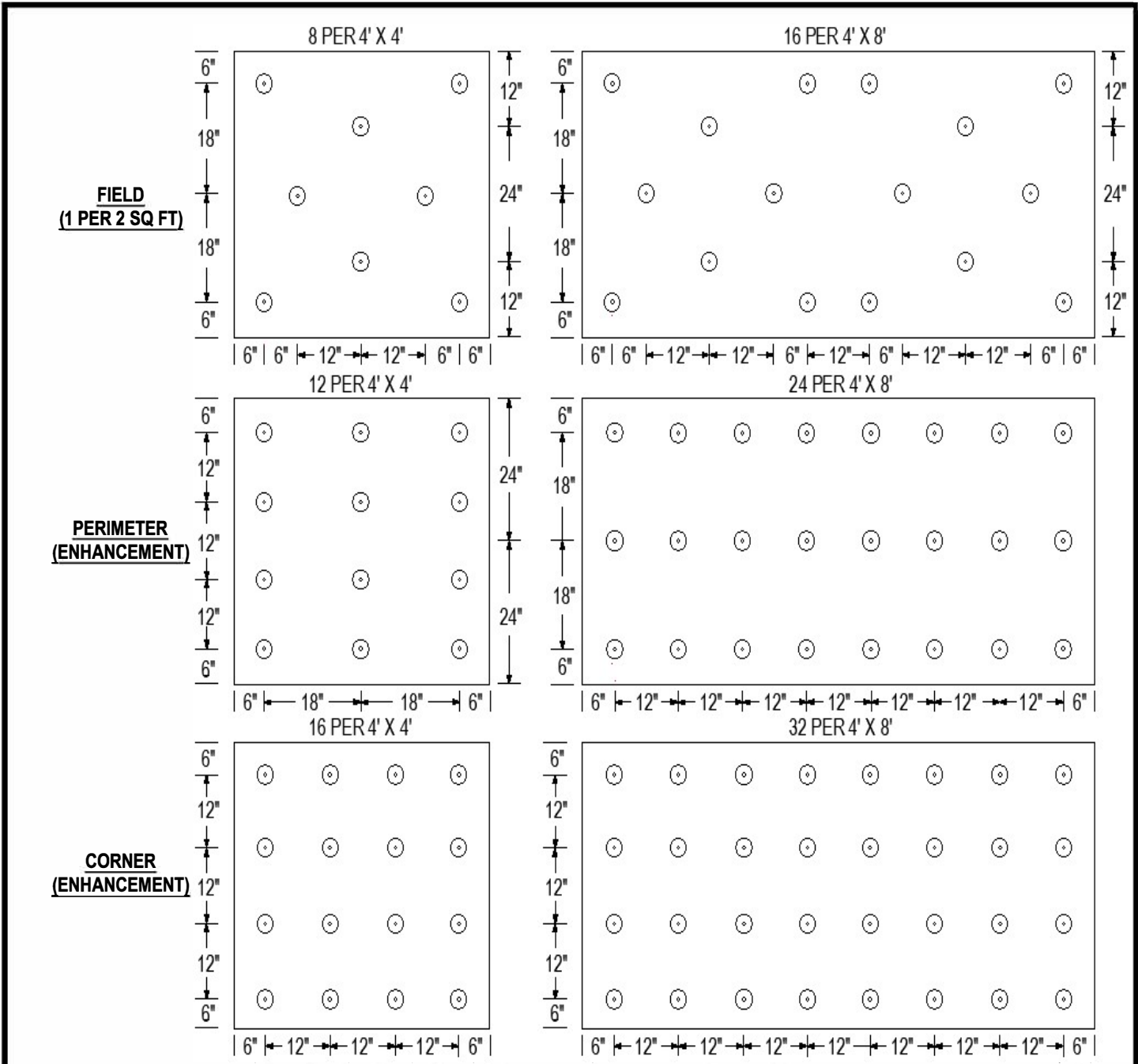
Submitted By: Address: Telephone:	Project: Address:
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NOTES:

1. FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER AN ADHERED TPO MEMBRANE SYSTEM.
2. AN APPROVED COVER BOARD IS REQUIRED OVER EPS & XPS, & INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB TPO MEMBRANES.

Scale: NTS	Detail Name: 1 Per 2.3 Fastening Patterns for Insulation/Cover Board	Detail Number: FA-T-06
Submitted By: Address: Telephone:		Project: Address:

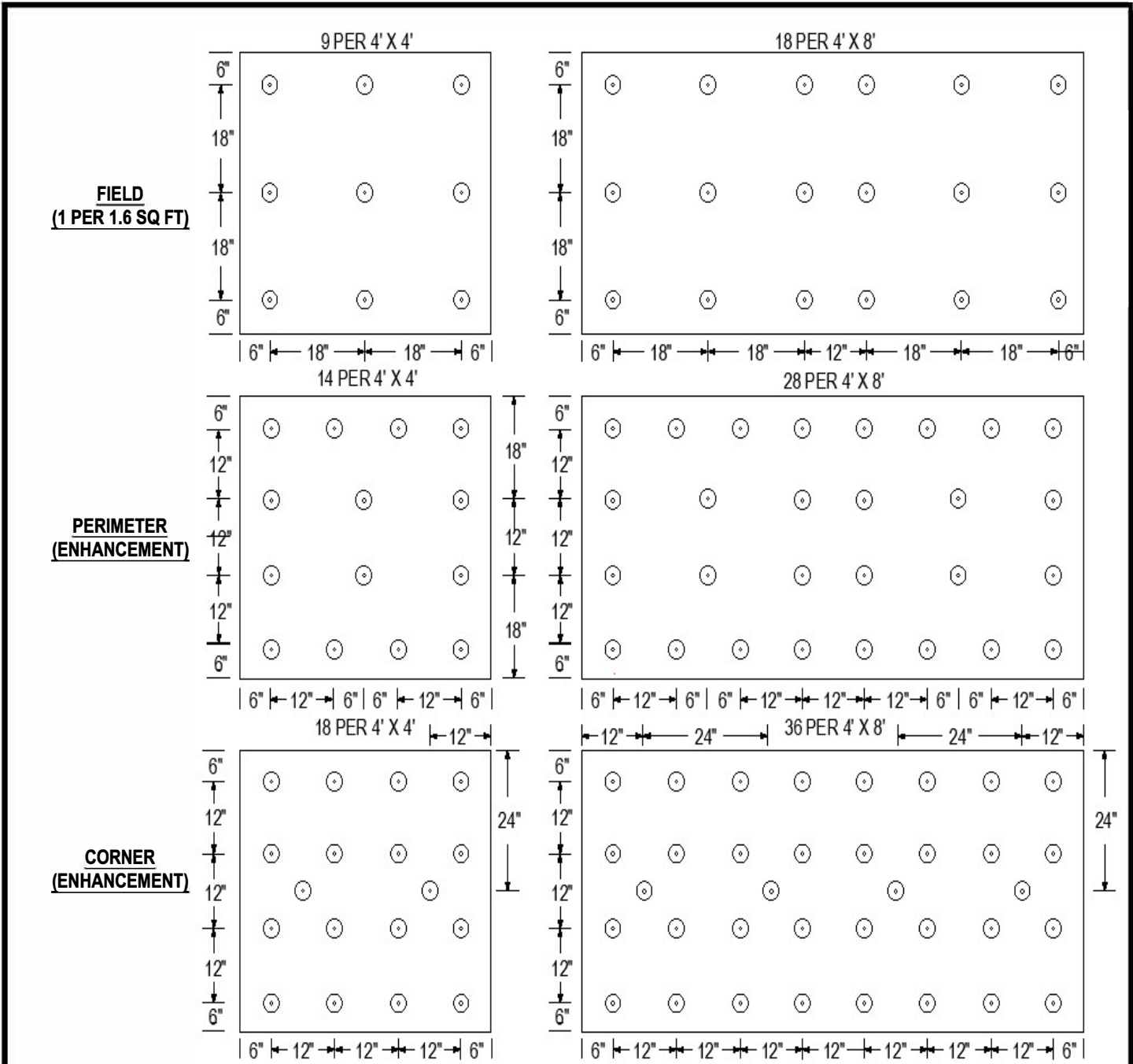


NOTES:

1. FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER AN ADHERED TPO MEMBRANE SYSTEM.
2. AN APPROVED COVER BOARD IS REQUIRED OVER EPS & XPS, & INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB TPO MEMBRANES.

Scale: NTS	Detail Name: 1 Per 2.0 Fastening Patterns for Insulation/Cover Board	Detail Number: FA-T-07
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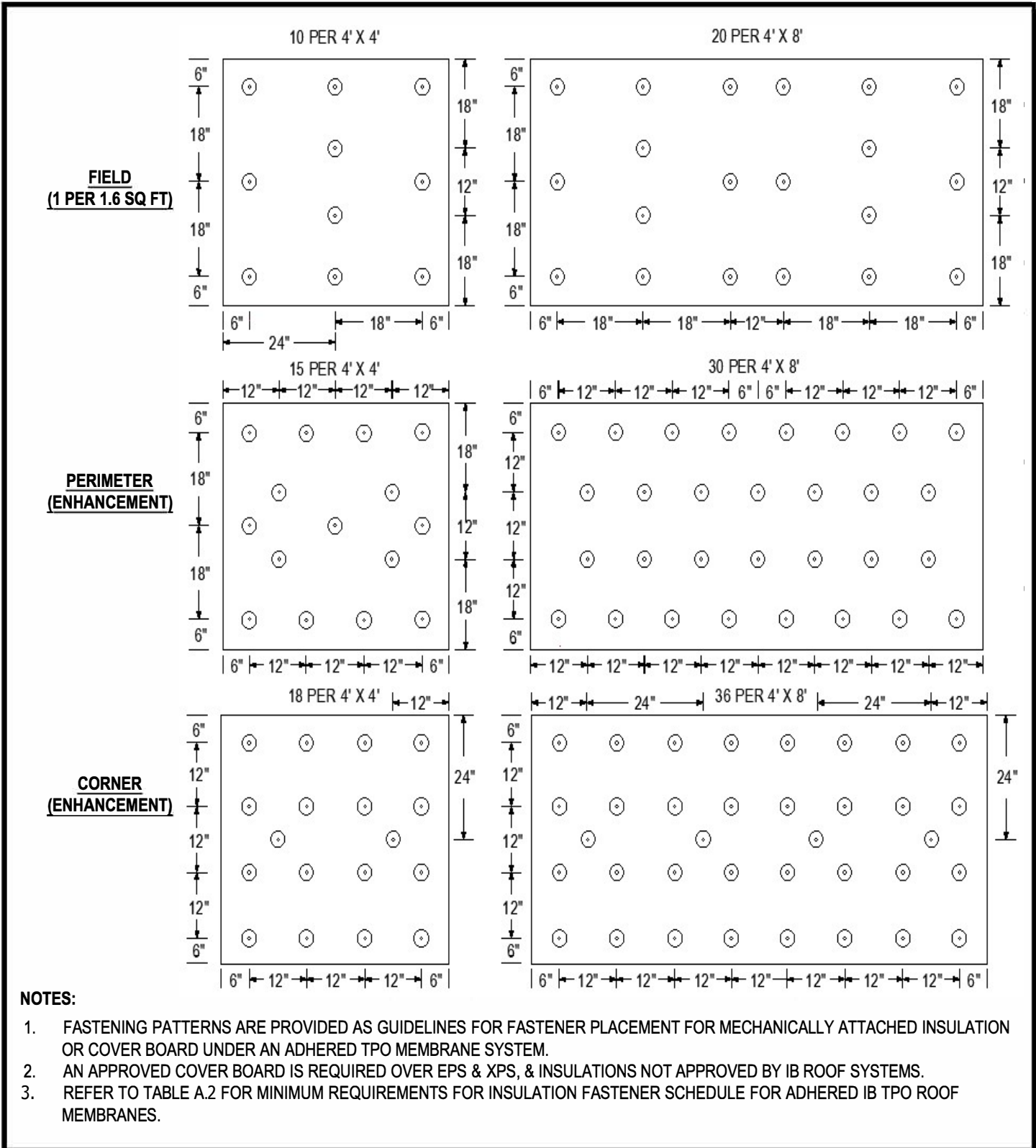


NOTES:

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2. AN APPROVED COVER BOARD IS REQUIRED OVER EPS & XPS, & INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB TPO MEMBRANE.

Scale: NTS	Detail Name: 1 Per 1.78 Fastening Patterns for Insulation/Cover Board	Detail Number: FA-T-08
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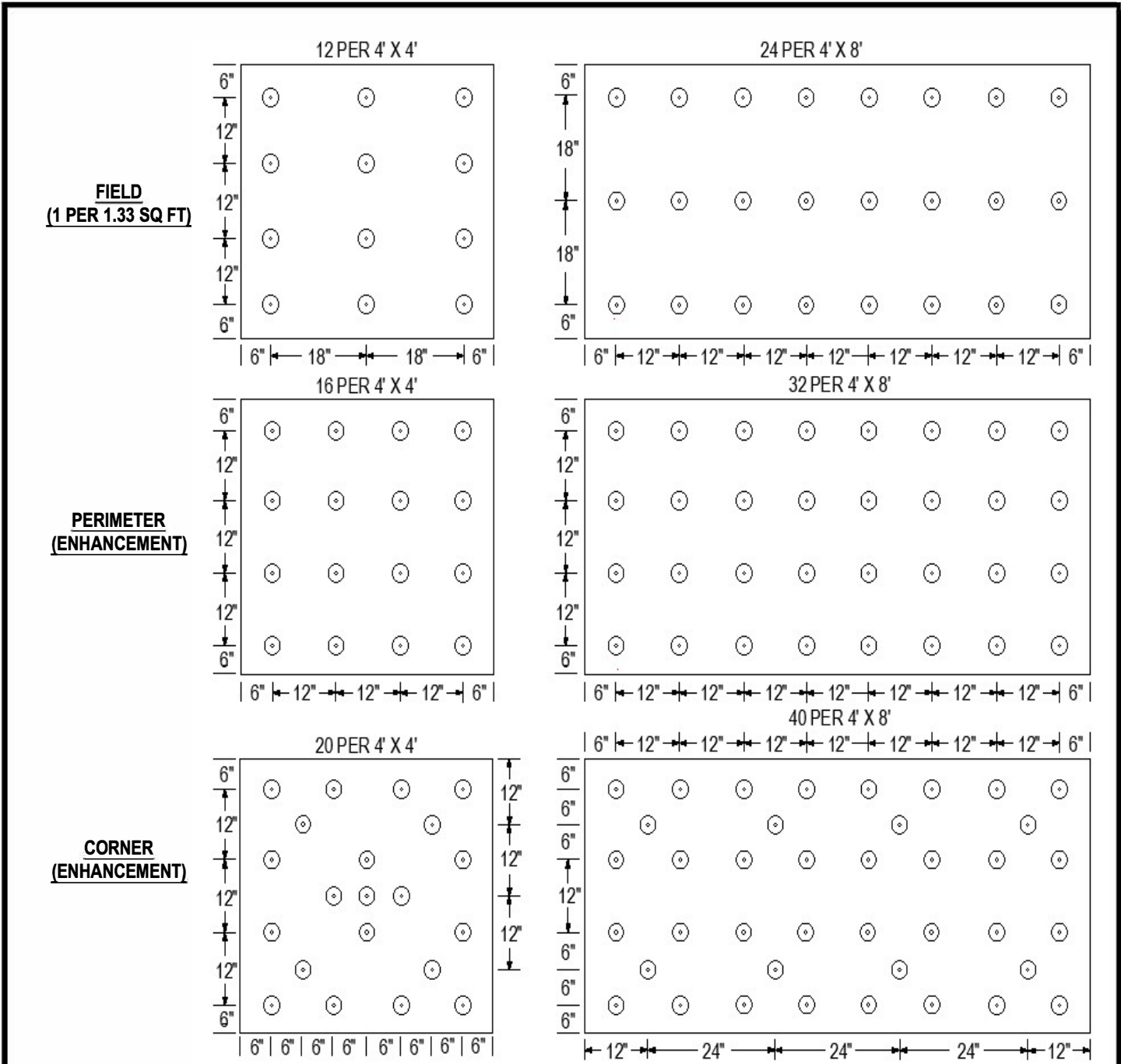
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NOTES:

1. FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER AN ADHERED TPO MEMBRANE SYSTEM.
2. AN APPROVED COVER BOARD IS REQUIRED OVER EPS & XPS, & INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB TPO ROOF MEMBRANES.

Scale: NTS	Detail Name: 1 Per 1.6 Fastening Patterns for Insulation/Cover Board	Detail Number: FA-T-09
Submitted By: Address: Telephone:		Project: Address:

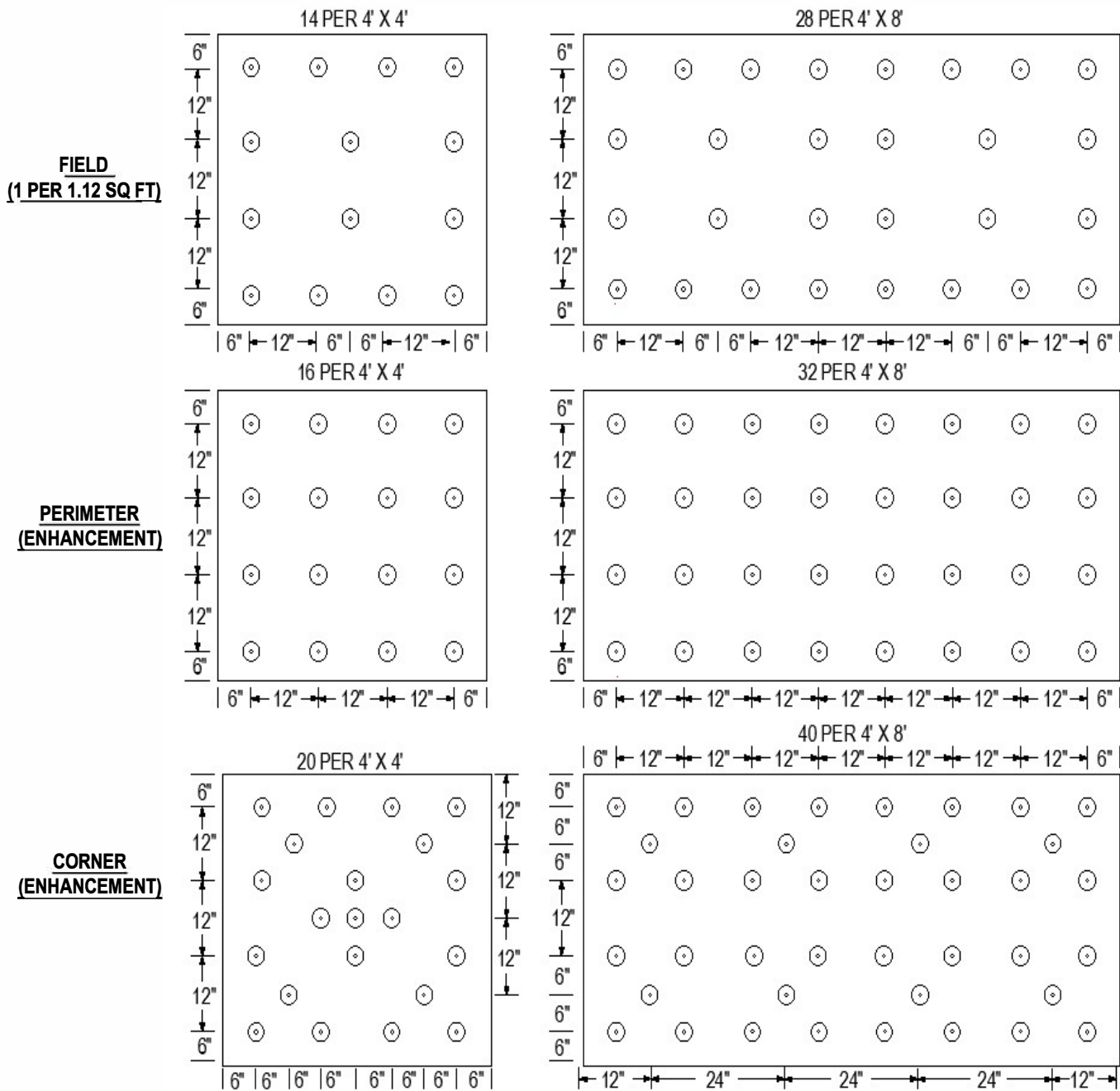


NOTES:

1. FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER AN ADHERED TPO MEMBRANE SYSTEM.
2. AN APPROVED COVER BOARD IS REQUIRED OVER EPS & XPS, & INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB TPO MEMBRANES.

Scale: NTS	Detail Name: 1 Per 1.33 Fastening Patterns for Insulation/Cover Board	Detail Number: FA-T-10
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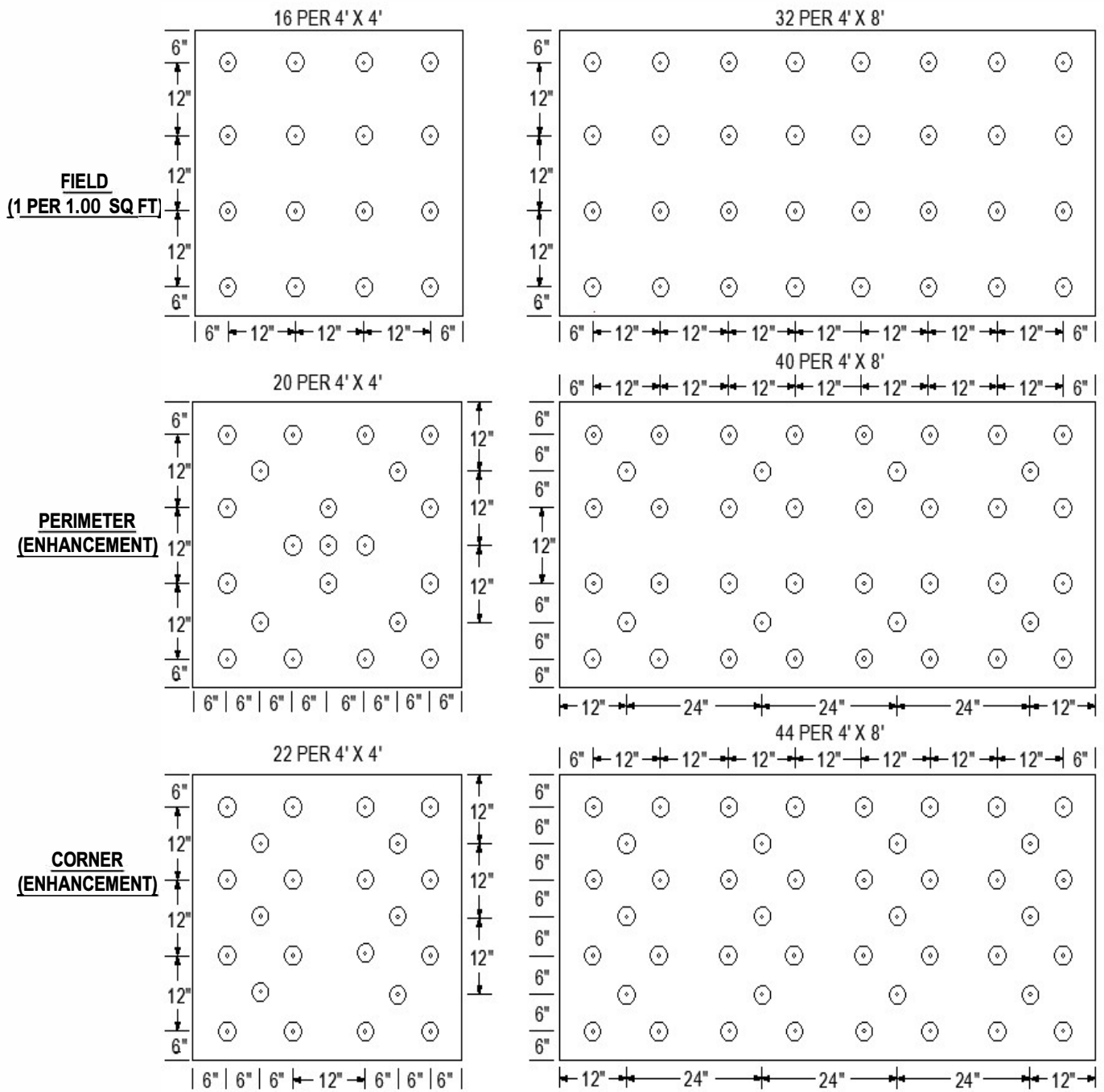


NOTES:

1. FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER AN ADHERED TPO MEMBRANE SYSTEM.
2. AN APPROVED COVER BOARD IS REQUIRED OVER EPS & XPS, & INSULATIONS NOT APPROVED BY IB TPO ROOF SYSTEMS.
3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENER SCHEDULE FOR ADHERED IB TPO MEMBRANES.

Scale: NTS	Detail Name: 1 Per 1.12 Fastening Patterns for Insulation/Cover Board	Detail Number: FA-T-11
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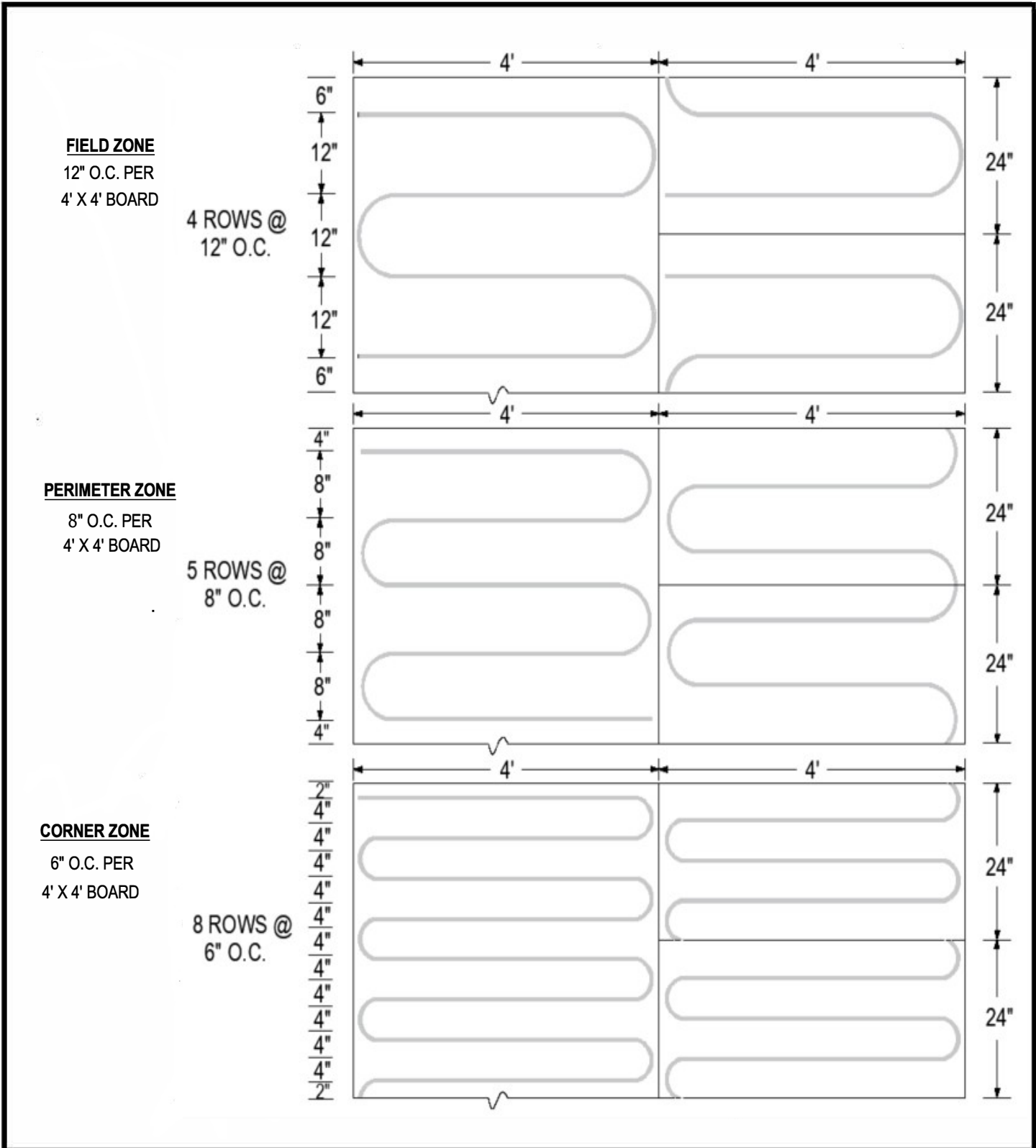
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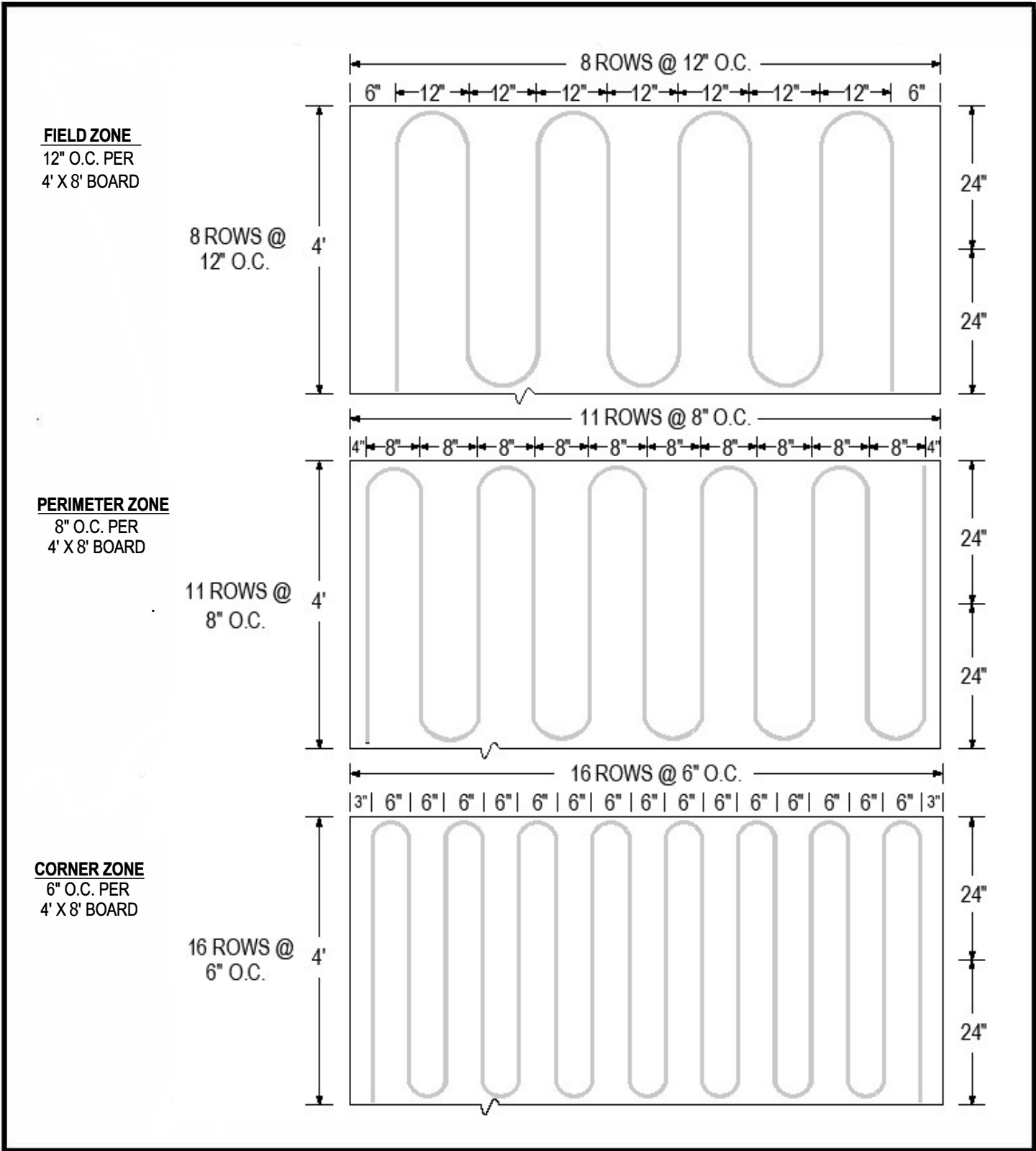
1. FASTENING PATTERNS ARE PROVIDED AS GUIDELINES FOR FASTENER PLACEMENT FOR MECHANICALLY ATTACHED INSULATION OR COVER BOARD UNDER AN ADHERED TPO MEMBRANE SYSTEM.
2. AN APPROVED COVER BOARD IS REQUIRED OVER EPS & XPS, & INSULATIONS NOT APPROVED BY IB ROOF SYSTEMS.
3. REFER TO TABLE A.2 FOR MINIMUM REQUIREMENTS FOR INSULATION FASTENING SCHEDULE FOR ADHERED IB TPO MEMBRANES.

Scale: NTS	Detail Name: 1 Per 1.0 Fastening Patterns for Insulation/Cover Board	Detail Number: FA-T-12
Submitted By: Address: Telephone:		Project: Address:



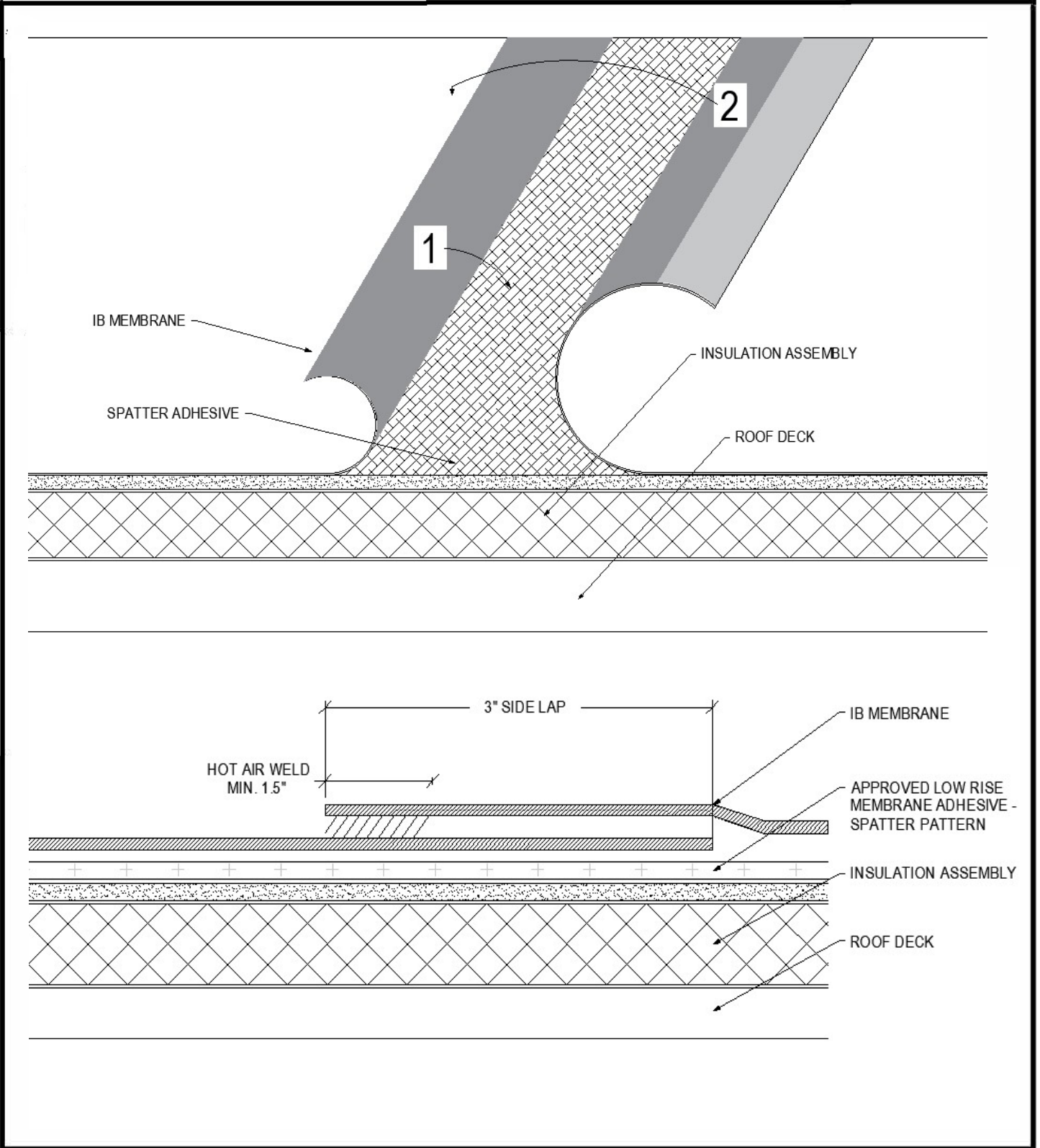
Scale: NTS	Detail Name: Ribbon Adhesive Layout - 4' x 4'	Detail Number: FA-T-13
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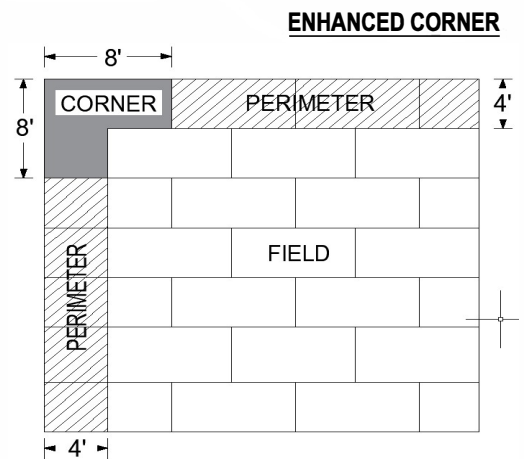
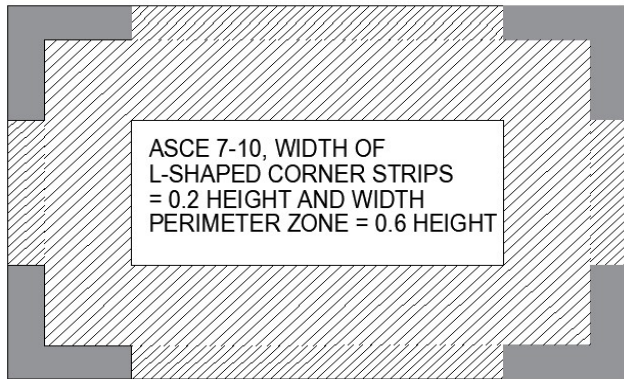
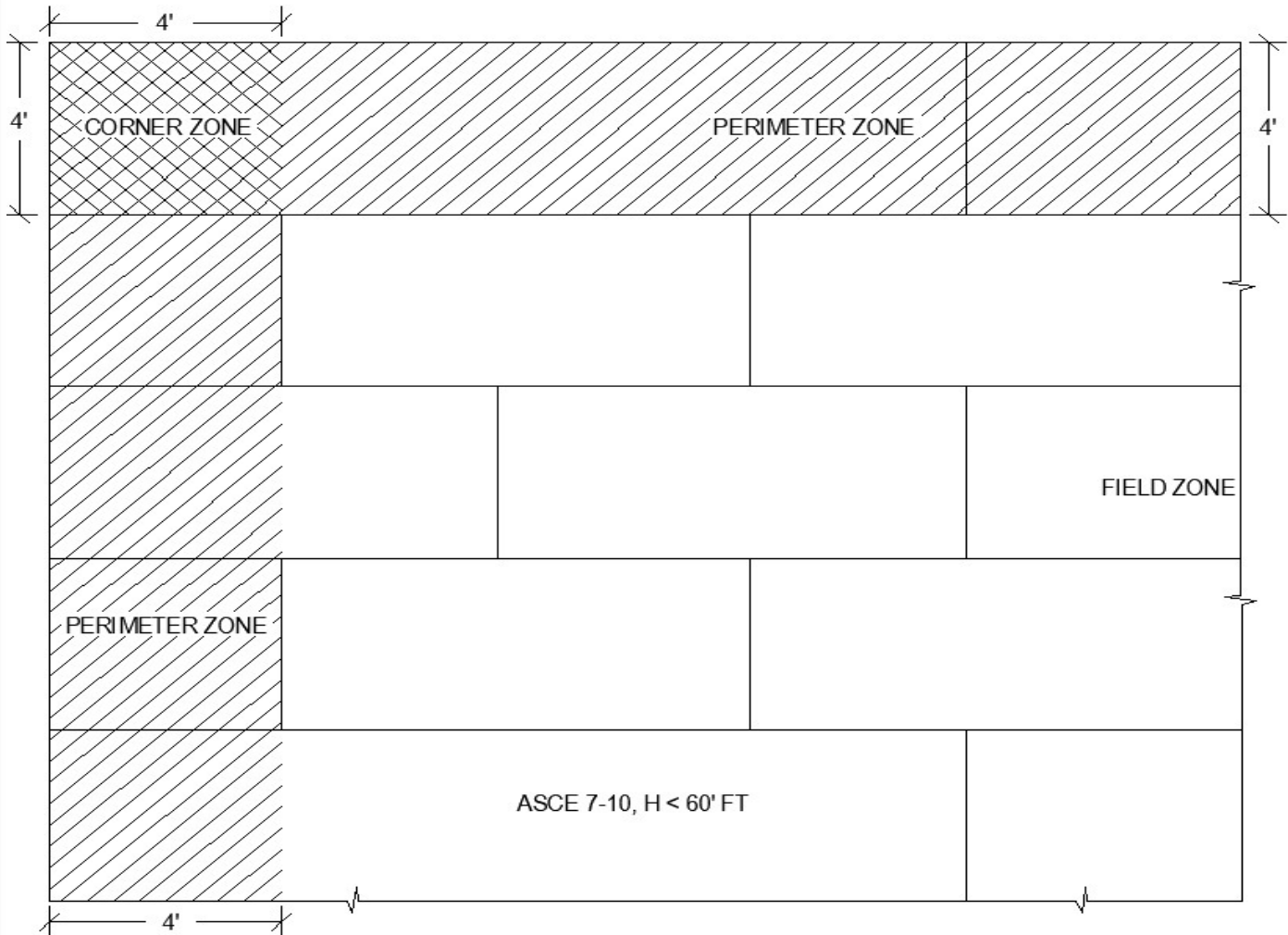


Scale: NTS	Detail Name: Ribbon Adhesive Layout - 4' x 8'	Detail Number: FA-T-14
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Scale: NTS	Detail Name: Spatter Adhesive for TPO FB Membrane Sheet Layout	Detail Number: FA-T-15
Submitted By: Address: Telephone:	Project: Address:	

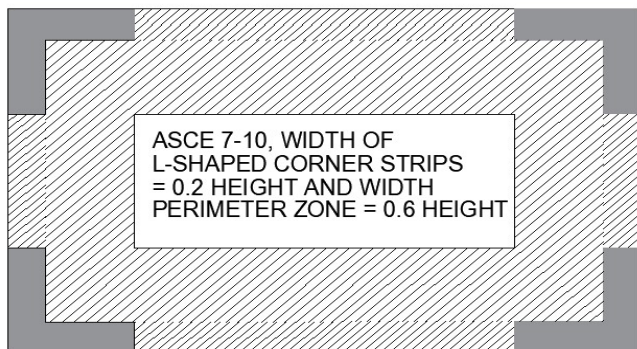
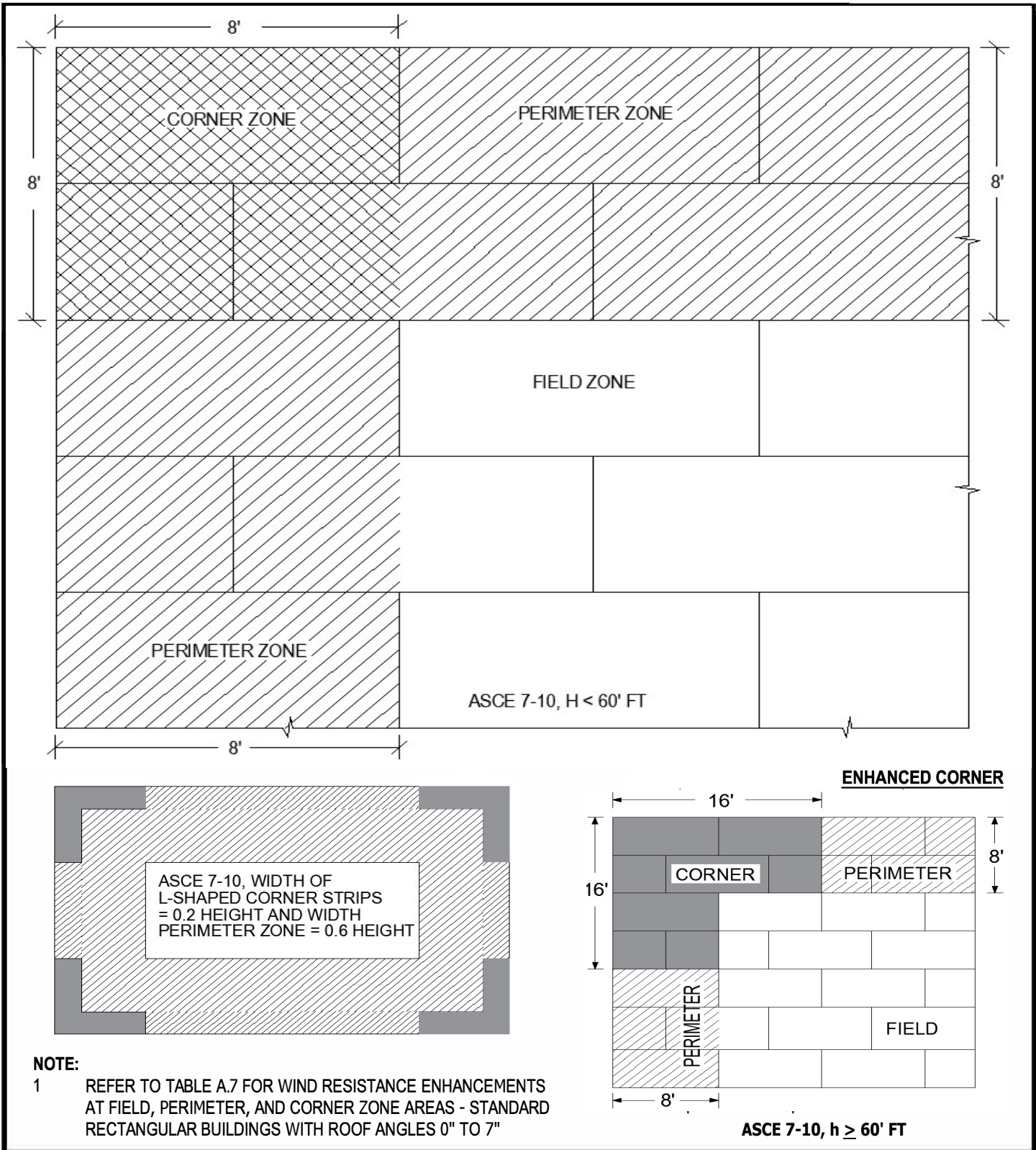


NOTE:
 1 REFER TO TABLE A.7 FOR WIND RESISTANCE ENHANCEMENTS AT FIELD, PERIMETER, AND CORNER ZONE AREAS - STANDARD RECTANGULAR BUILDINGS WITH ROOF ANGLES 0° TO 7°

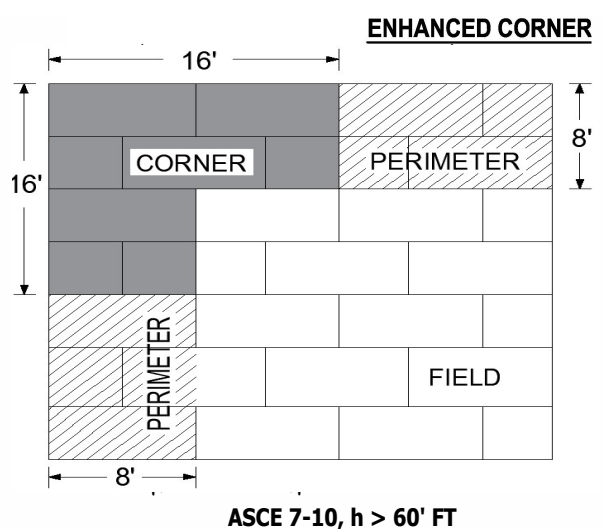
ASCE 7-10, $h \geq 60'$ FT

Scale: NTS	Detail Name: 4 Foot Perimeter & Corner Zone Layout	Detail Number: FA-T-16
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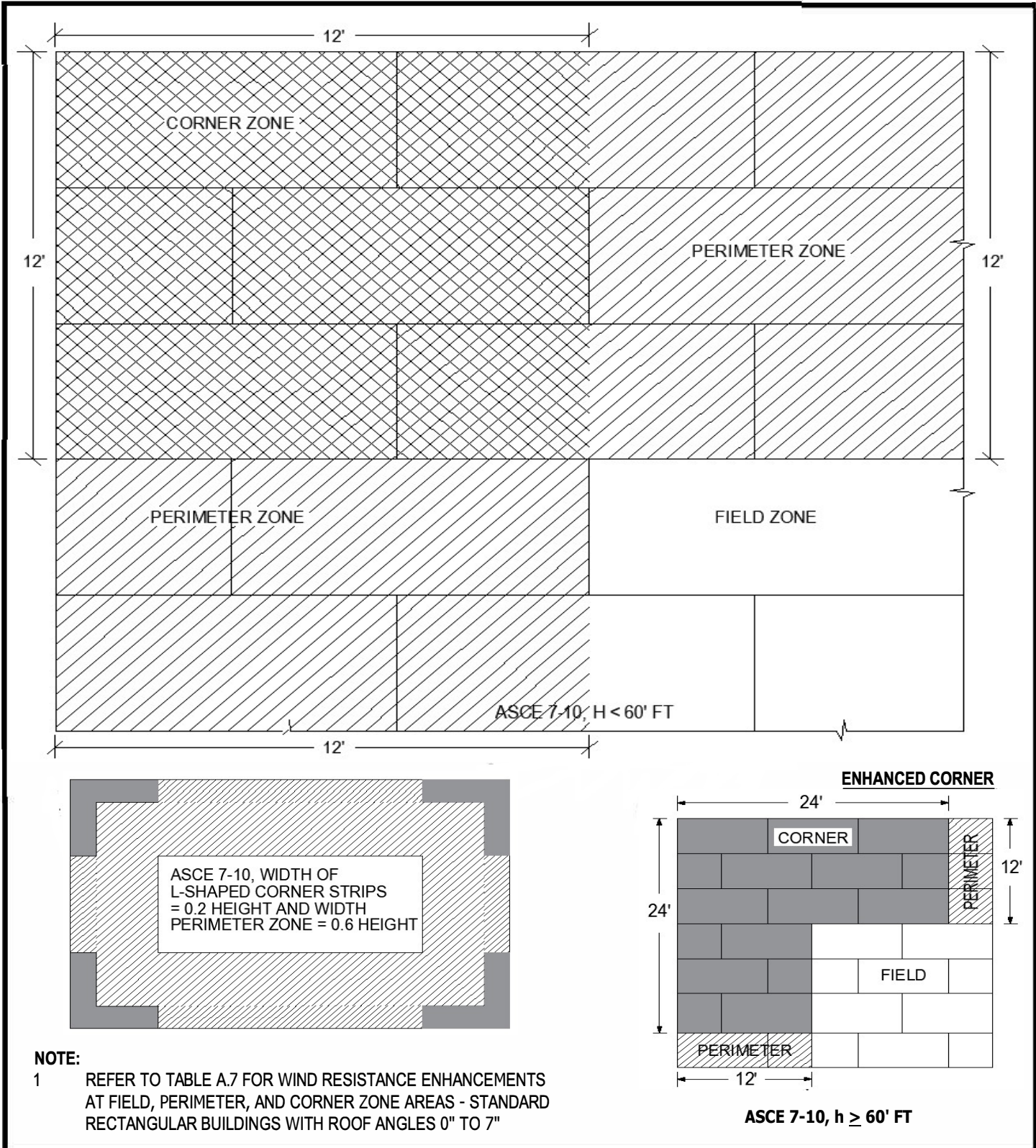


NOTE:
1 REFER TO TABLE A.7 FOR WIND RESISTANCE ENHANCEMENTS AT FIELD, PERIMETER, AND CORNER ZONE AREAS - STANDARD RECTANGULAR BUILDINGS WITH ROOF ANGLES 0" TO 7"

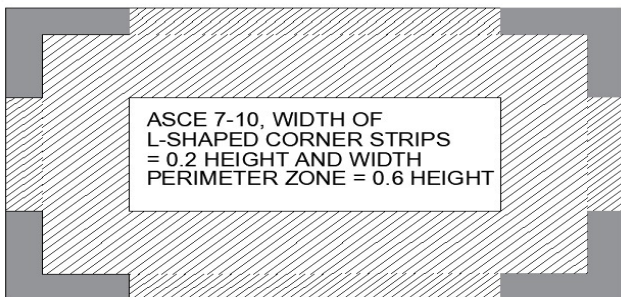
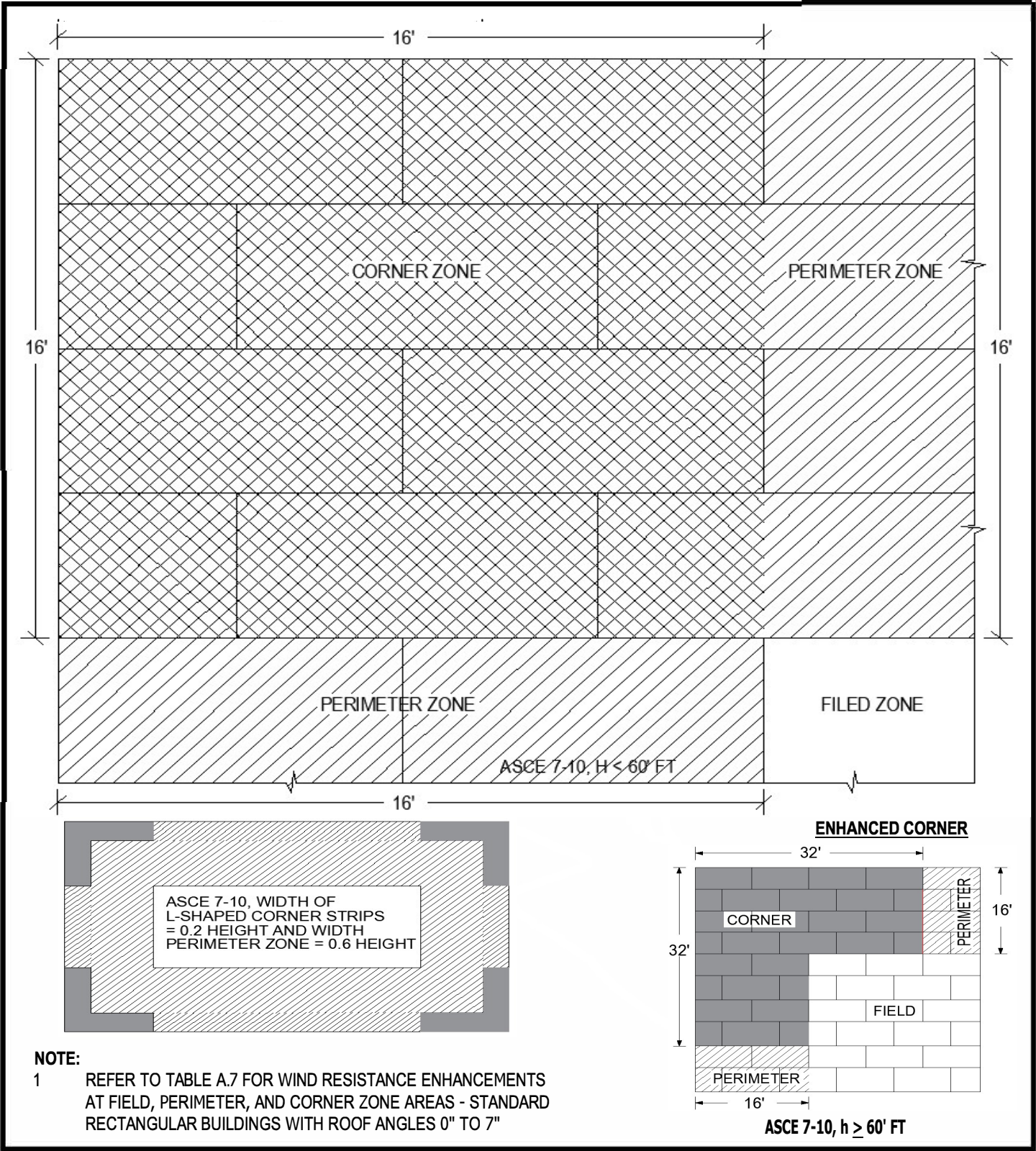


Scale: NTS	Detail Name: <h2 style="text-align: center;">8 Foot Perimeter & Corner Zone Layout</h2>	Detail Number: FA-T-17
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Submitted By: Address: Telephone:	Project: Address:
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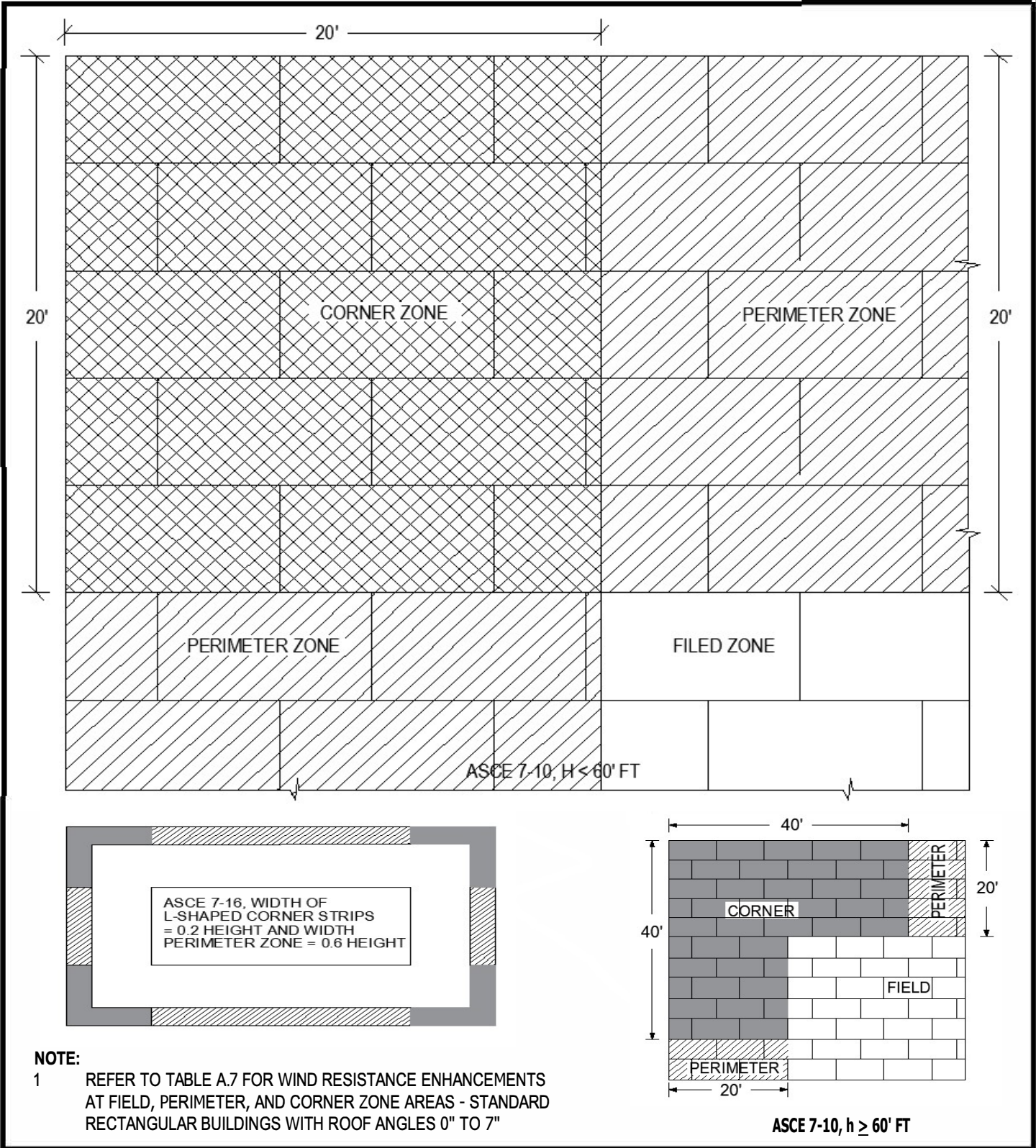
<p>Scale: NTS</p>	<p>Detail Name: 12 Foot Perimeter & Corner Zone Layout</p>	<p>Detail Number: FA-T-18</p>
<p>Submitted By: Address: Telephone:</p>	<p>Project: Address:</p>	



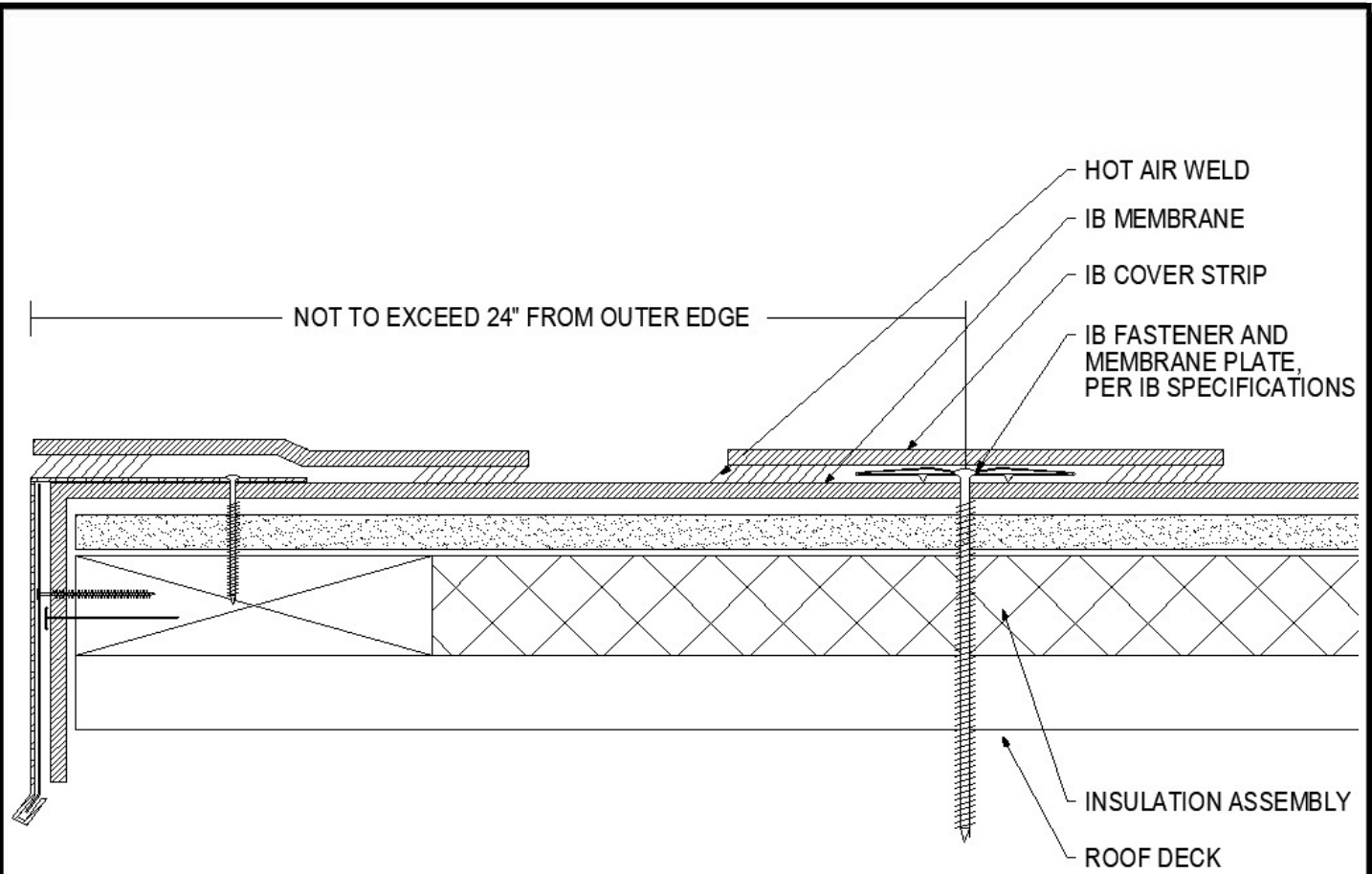
NOTE:
1 REFER TO TABLE A.7 FOR WIND RESISTANCE ENHANCEMENTS AT FIELD, PERIMETER, AND CORNER ZONE AREAS - STANDARD RECTANGULAR BUILDINGS WITH ROOF ANGLES 0° TO 7°

Scale: NTS	Detail Name: 16 Foot Perimeter & Corner Zone Layout	Detail Number: FA-T-19
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Scale: NTS	Detail Name: 20 Foot Perimeter & Corner Zone Layout	Detail Number: FA-T-20
Submitted By: Address: Telephone:		Project: Address:



NOTES:

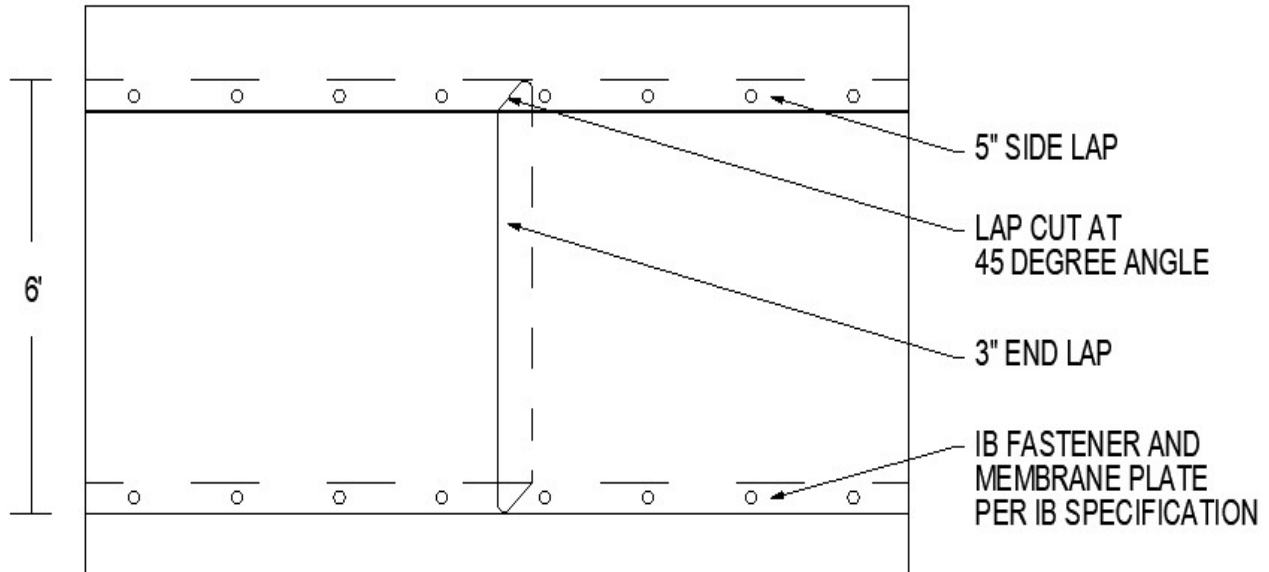
INSTALL IB APPROVED PEEL STOP DETAIL ON ALL ADHERED IB TPO ROOF ASSEMBLIES WHERE THE FOLLOWING CONDITIONS OCCUR:

1. WIND RIDER WARRANTY IN EXCESS OF STANDARD PUBLISHED IB WARRANTY TERMS AND CONDITIONS
2. FACTORY MUTUAL PROJECTS WHERE REQUIRED BY FM INSTALLATION GUIDELINES
3. ROOF INSTALLATIONS WHERE:
 - A. BASIC WIND SPEED ZONE GREATER THAN ASCE 7-10 120 MPH (ASCE 7-05 90 MPH) WHERE ONE OR MORE OF THE FOLLOWING CONDITIONS OCCUR:
 - BUILDING CLASSIFICATION IS PARTIALLY ENCLOSED
 - DESIGN VELOCITY PRESSURES IS ABOVE -52.5 PSF
 - BUILDING LOCATED WITHIN SPECIAL WIND REGIONS OR HURRICANE ZONES
 - B. BASIC WIND SPEED ZONE LESS THAN OR EQUAL TO ASCE 7-10 120 MPH (ASCE 7-05 90 MPH) WHERE ONE OR MORE OF THE FOLLOWING CONDITIONS OCCUR:
 - ROOF HEIGHTS ABOVE 30' WITH PERIMETER METAL EDGE OR GUTTER DETAIL (NON-PARAPET WALL)
 - ALL ROOF HEIGHTS ABOVE 60'
 - BUILDING CLASSIFICATION IS PARTIALLY ENCLOSED
 - GUTTER OR EDGE DETAIL DOES NOT INCLUDE CONTINUOUS CLEAT

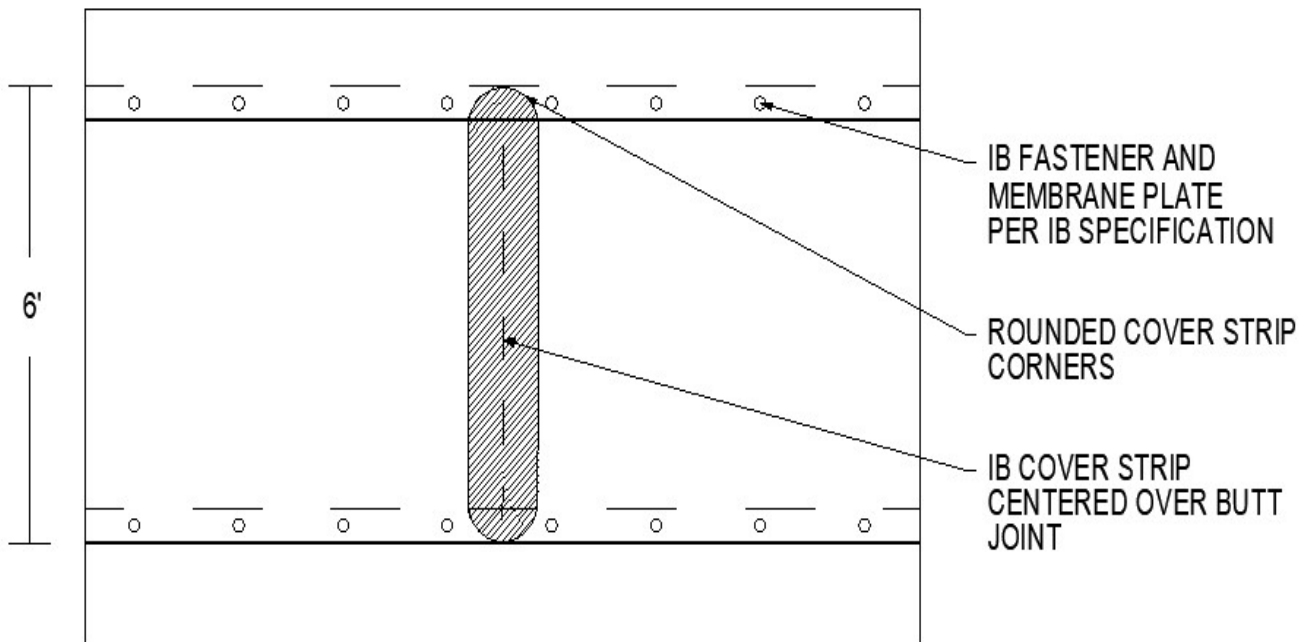
Scale: NTS	Detail Name: <h2 style="text-align: center;">Adhered TPO Peel Stop</h2>	Detail Number: FA-T-21
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Submitted By: Address: Telephone:	Project: Address:
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IB MEMBRANE END LAPS



IB FLEECBACK MEMBRANE END LAPS



NOTE:

1. REFER TO IB TPO T-JOINT PATCH DETAIL FOR IB TPO SM & FB MEMBRANES

<p>Scale: NTS</p>	<p>Detail Name: Membrane End Laps for Adhered TPO Membrane</p>	<p>Detail Number: FA-T-22</p>
<p>Submitted By: Address: Telephone:</p>	<p>Project: Address:</p>	