



DEGENKOLB ENGINEERS

300 South Grand Ave. #1115, Los Angeles, CA 90071

(213) 596-5000 (phone)

(213) 596-5000 (phone)

www.degenkolb.com

Sheet

1 of 20

Office Of Statewide Health Planning And Development
ANCHORAGE PRE-APPROVAL

OPA - 2343 - 07

PRODUCT MANUFACTURER: **PETER PEPPER PRODUCTS**

PRODUCT NAME/TYPE/MODEL: **INFECTION CONTROL CENTER [ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2]**

GENERAL NOTES:

1. FORCES ARE DETERMINED PER 2007 CALIFORNIA BUILDING CODE SECTION 1613A AND ASCE 7-05 SECTIONS 11, 12 AND 13 USING THE FOLLOWING EQUATION (EQ. 13.3-2):

$$F_p = 1.6 S_Ds I_p W_p = 4.62 W_p$$

$$F_v = 0.2 S_Ds W_p = 0.39 W_p \text{ WHERE,}$$

$$S_Ds = 2/3 F_a S_s = 1.927g \text{ (EQ. 11.4-3)}$$

$$I_p = 1.50$$

$$F_a = 1.00$$

$$S_s = 2.89g$$

$$W_p = \text{MAXIMUM OPERATING WEIGHT}$$

NOTE THAT THE FORCE LEVEL IS FOR STRENGTH DESIGN

2. THIS PRE-APPROVAL CONFORMS TO THE 2007 CALIFORNIA BUILDING CODE.
3. THE DETAILS IN THIS PRE-APPROVAL MAY BE USED AT ANY LOCATION IN THE STATE OF CALIFORNIA.
4. THE DETAILS MAY BE USED FOR ANY LEVEL OF THE BUILDING WHERE THE ABOVE STATED PRODUCT IS LOCATED.





DEGENKOLB ENGINEERS

300 South Grand Ave. #1115, Los Angeles, CA 90071

(213) 596-5000 (phone)

(213) 596-5000 (phone)

www.degenkolb.com

Sheet

2 of 20

**Office Of Statewide Health Planning And Development
ANCHORAGE PRE-APPROVAL**

OPA - 2343 - 07

PRODUCT MANUFACTURER: **PETER PEPPER PRODUCTS**

PRODUCT NAME/TYPE/MODEL: **INFECTION CONTROL CENTER [ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2]**

GENERAL NOTES (CONT'D):

5. ALL LOADS SHOWN ON THE CALCULATIONS ARE BASED ON STRENGTH DESIGN.
6. THIS UNIT DOES NOT REQUIRE SEISMIC CERTIFICATION.
7. TYPICAL DIMENSIONAL TOLERANCE IS $\pm \frac{1}{4}$ ".

RESPONSIBILITIES OF THE STRUCTURAL ENGINEER OF RECORD:

1. VERIFY THAT THE ANCHORS ARE AN ADEQUATE DISTANCE FROM ANY NEW OR EXISTING ANCHORS.
2. VERIFY THAT THE ANCHORS ARE AN ADEQUATE DISTANCE FROM ANY WALL OPENINGS.
3. VERIFY THE INSTALLATION IS IN CONFORMANCE WITH THE 2007 CBC AND WITH THE DETAILS SHOWN IN THIS PRE-APPROVAL. VERIFY THAT THE EQUIPMENT'S ACTUAL WEIGHT, CG LOCATION, ANCHOR LOCATIONS, ANCHOR DETAILS AND THE MATERIAL AND GAGE OF THE UNIT WHERE ATTACHMENTS ARE MADE AGREE WITH THE INFORMATION SHOWN IN THIS PRE-APPROVAL.
4. DESIGN ANY SUPPLEMENTARY MEMBERS AND THEIR ATTACHMENTS TO WHICH THE UNIT IS ANCHORED OR MAKE ADJUSTMENTS AS NECESSARY.
5. VERIFY THE ADEQUACY OF ANY EXISTING MEMBERS AND THEIR ATTACHMENTS TO WHICH THE UNIT IS ANCHORED, FOR THE FORCES EXERTED ON THEM BY THE UNIT IN ADDITION TO ALL OTHER LOADS AND FORCES.
6. VERIFY THAT THE CONCRETE WALL/CMU WALL WHICH THE UNIT IS ATTACHED TO IS NOT CRACKED





DEGENKOLB ENGINEERS

300 South Grand Ave. #1115, Los Angeles, CA 90071

(213) 596-5000 (phone)

(213) 596-5000 (phone)

www.degenkolb.com

Sheet

3 of 20

**Office Of Statewide Health Planning And Development
ANCHORAGE PRE-APPROVAL**

OPA - 2343 - 07

PRODUCT MANUFACTURER: PETER PEPPER PRODUCTS

PRODUCT NAME/TYPE/MODEL: INFECTION CONTROL CENTER [ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2]

MATERIAL SPECIFIC NOTES FOR SUPPORTING STRUCTURAL MEMBERS:

1. LIGHT GAGE METAL:
MINIMUM GAGE: 20 GA.
MINIMUM YIELD STRENGTH (f_y) = 33 KSI
2. WOOD:
MINIMUM GRADE: DOUGLAS FIR NO.3 OR BETTER
MINIMUM SPECIFIC GRAVITY (G) = 0.46
3. CONCRETE:
MINIMUM UNIT WEIGHT = 110 pcf (LIGHT WEIGHT CONCRETE)
MINIMUM UNIT WEIGHT = 145 pcf (NORMAL WEIGHT CONCRETE)
MINIMUM COMPRESSIVE STRENGTH (f'_c) = 2500 PSI
4. MASONRY:
MINIMUM COMPRESSIVE STRENGTH (f'_m) = 1500 PSI
5. SEE 2007 CALIFORNIA BUILDING CODE FOR MORE INFORMATION AND OTHER REQUIREMENTS..
6. IF THE WOOD MATERIAL USED HAS A LOWER QUALITY THAN WHAT IS SPECIFIED ABOVE, SEOR SHALL EVALUATE THE BACKING SUPPORT DESIGN.





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

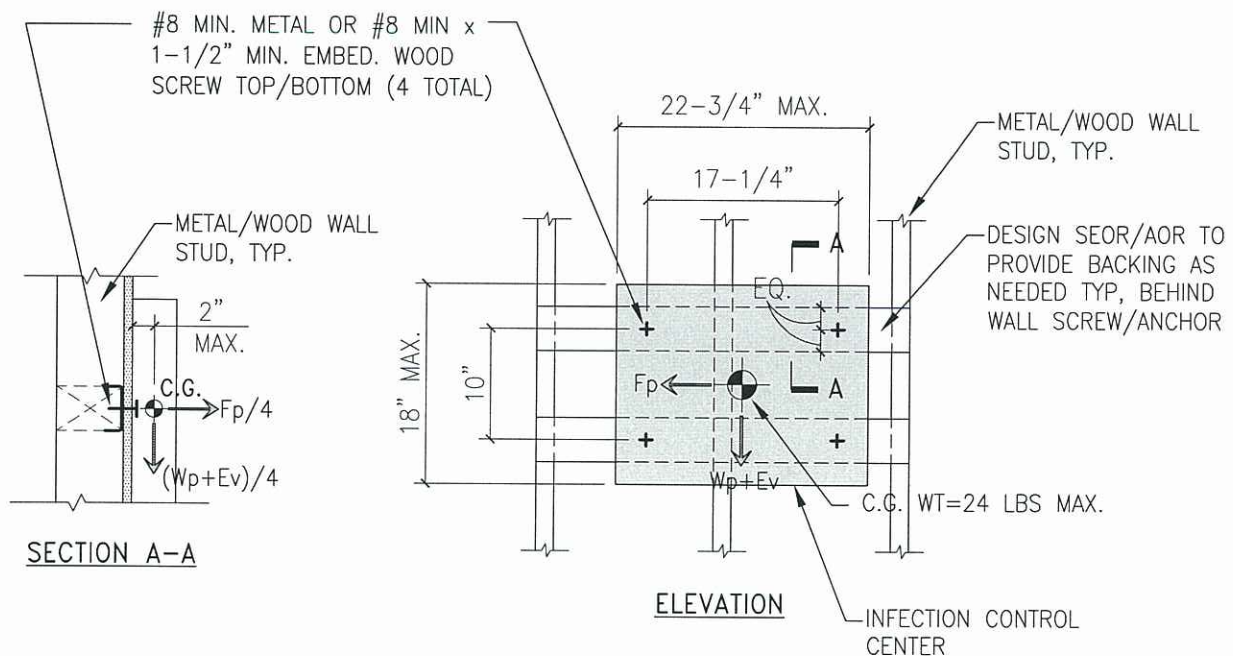
Sheet
4 of 20

PETER PEPPER PRODUCTS

INFECTION CONTROL CENTER
ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Designed By	TY
Project #	A8621021.00
Date	09/09/2009

ICX-1 (METAL/WOOD STUDWALL ATTACHMENT)



MAXIMUM DEMANDS AT WALL SCREWS

CASE 1: EQ FORCE PERPEND. TO WALL

TENSION = 49.9 LBS SHEAR = 15.1 LBS

CASE 2: EQ FORCE PARALLEL TO WALL

TENSION = 16.1 LBS SHEAR = 46.4 LBS



APPROVED
Fixed Equipment Anchorage
Office of Statewide Health Planning and Development



OPA-2343-07

Pre-approval Program Manager:
Anthony R. Pike
(916) 440-5470

George Zhu September 24, 2009
Reviewed By: George Zhu Date



Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

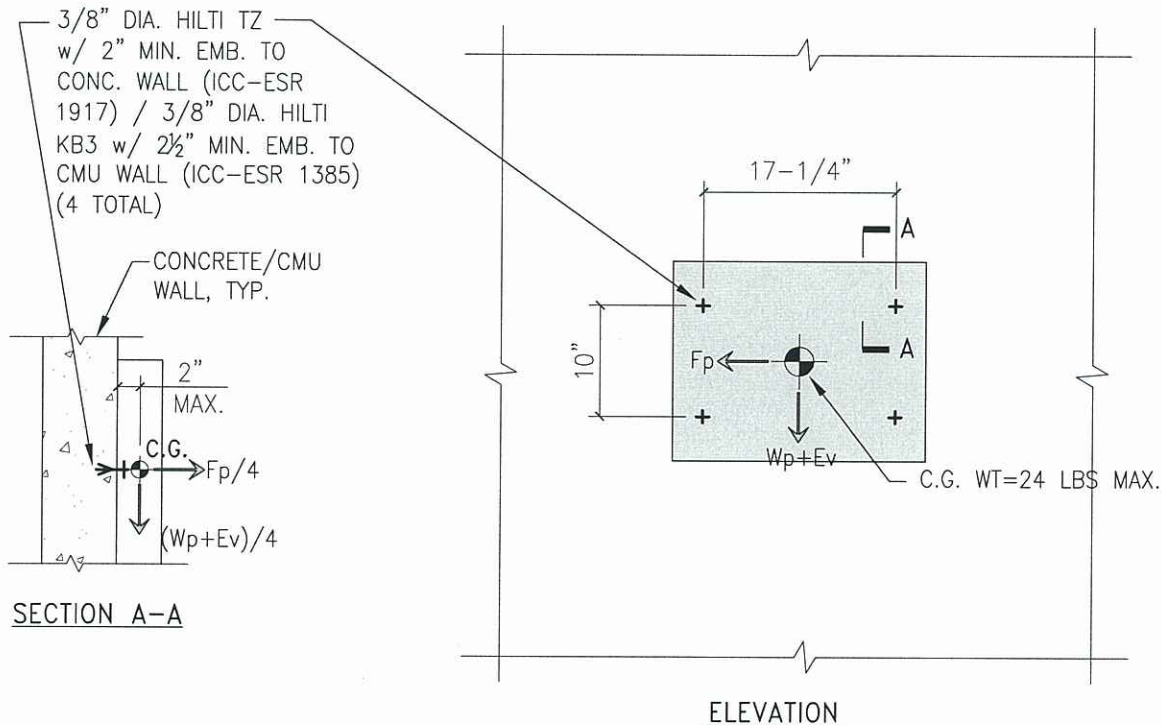
Sheet
5 of 20

PETER PEPPER PRODUCTS

INFECTION CONTROL CENTER
ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Designed By	TY
Project #	A8621021.00
Date	09/09/2009

ICX-1 (CONCRETE/CMU WALL ATTACHMENT)



NOTES:

1. SEE PAGE 4 FOR INFO NOT SHOWN

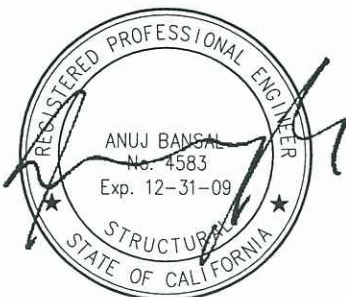
MAXIMUM DEMANDS AT WALL ANCHORS

CASE 1: EQ FORCE PERPEND. TO WALL

TENSION = 64.9 LBS SHEAR = 19.6 LBS

CASE 2: EQ FORCE PARALLEL TO WALL

TENSION = 21.1 LBS SHEAR = 60.3 LBS





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

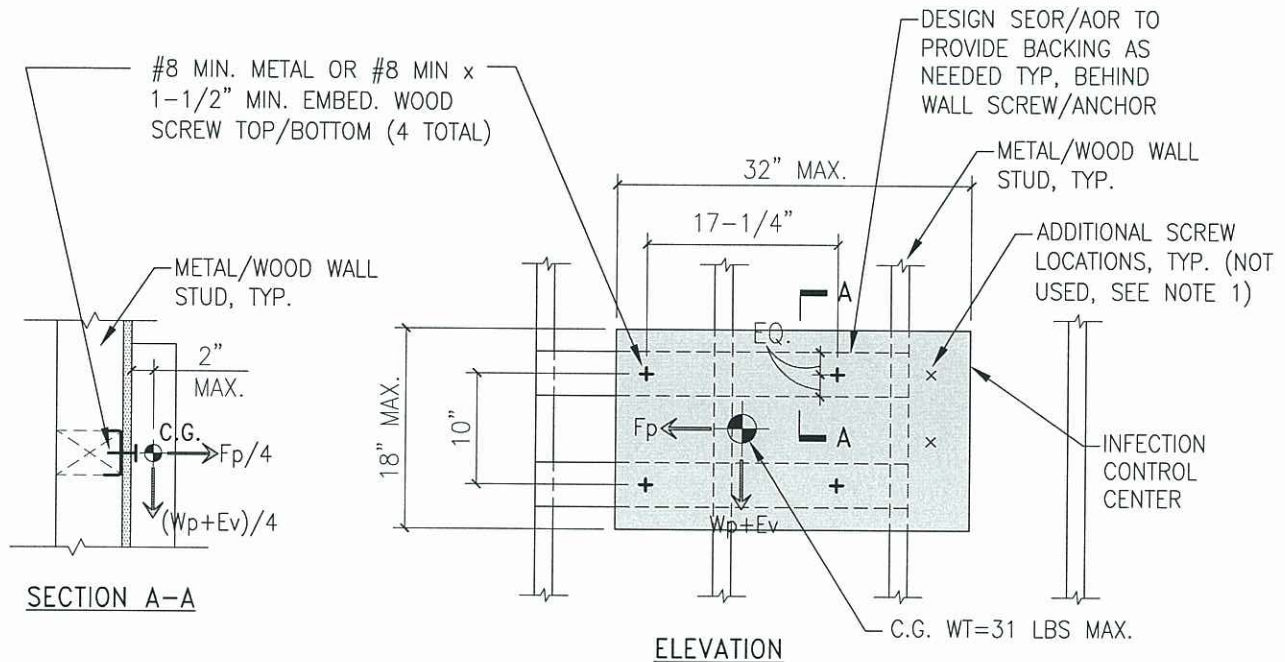
Sheet
6 of 20

PETER PEPPER PRODUCTS

INFECTION CONTROL CENTER
ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Designed By	TY
Project #	A8621021.00
Date	09/09/2009

ICX-2 (METAL/WOOD STUDWALL ATTACHMENT)

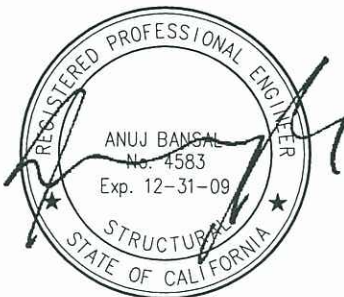


NOTES:

1. TO ACCOUNT FOR UNCERTAINTY OF OPERATING C.G. LOCATION, THE MAXIMUM DEMANDS SHOWN SHALL BE INCREASED BY 20% FOR DESIGNING BACKING STRUCTURAL MEMBERS.

MAXIMUM DEMANDS AT WALL SCREWS

CASE 1: EQ FORCE PERPEND. TO WALL	
TENSION = 49.9 LBS	SHEAR = 15.1 LBS
CASE 2: EQ FORCE PARALLEL TO WALL	
TENSION = 16.1 LBS	SHEAR = 46.4 LBS





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

Sheet
7 of 20

PETER PEPPER PRODUCTS

INFECTION CONTROL CENTER

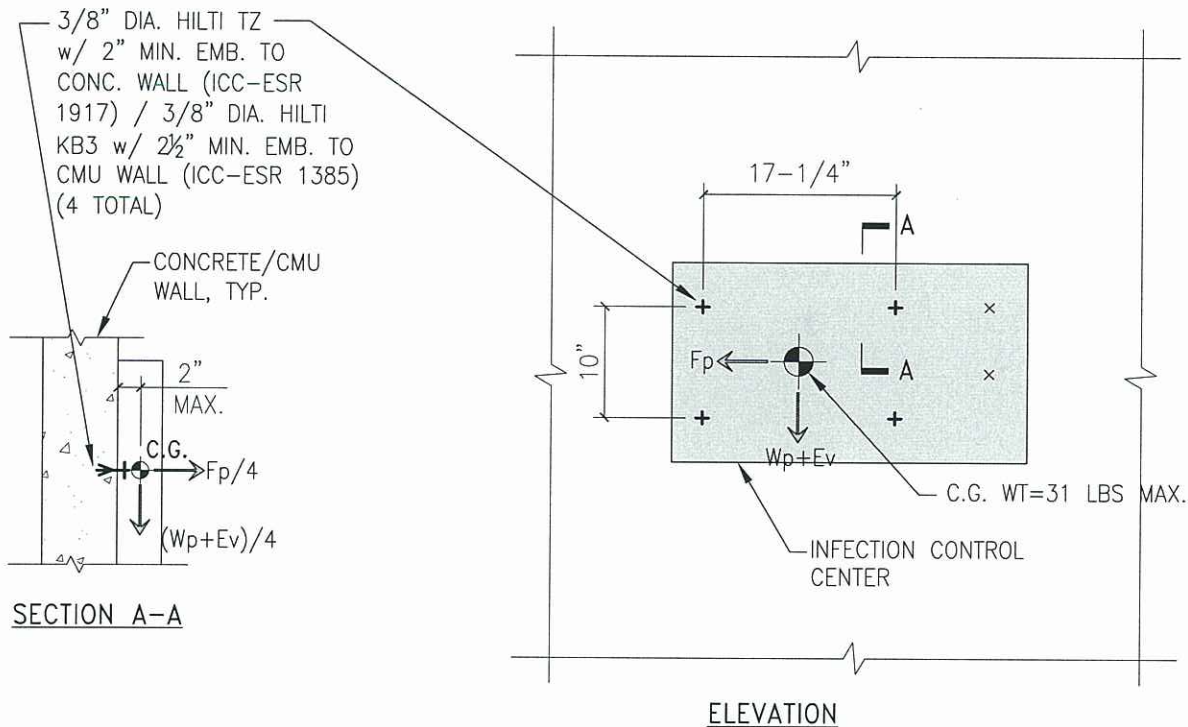
ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Designed By TY

Project # A8621021.00

Date 09/09/2009

ICX-2 (CONCRETE/CMU WALL ATTACHMENT)



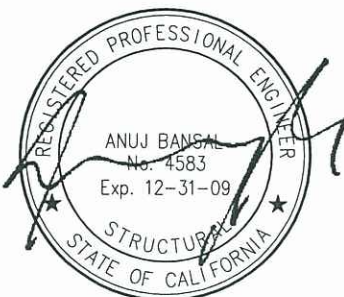
MAXIMUM DEMANDS AT WALL ANCHORS

CASE 1: EQ FORCE PERPEND. TO WALL	
TENSION = 64.9 LBS	SHEAR = 19.6 LBS

CASE 2: EQ FORCE PARALLEL TO WALL	
TENSION = 21.1 LBS	SHEAR = 60.3 LBS

NOTES:

1. SEE PAGE 6 FOR INFO NOT SHOWN
2. SEE NOTE 1 ON PAGE 6





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

Sheet
8 of 20

PETER PEPPER PRODUCTS

INFECTION CONTROL CENTER

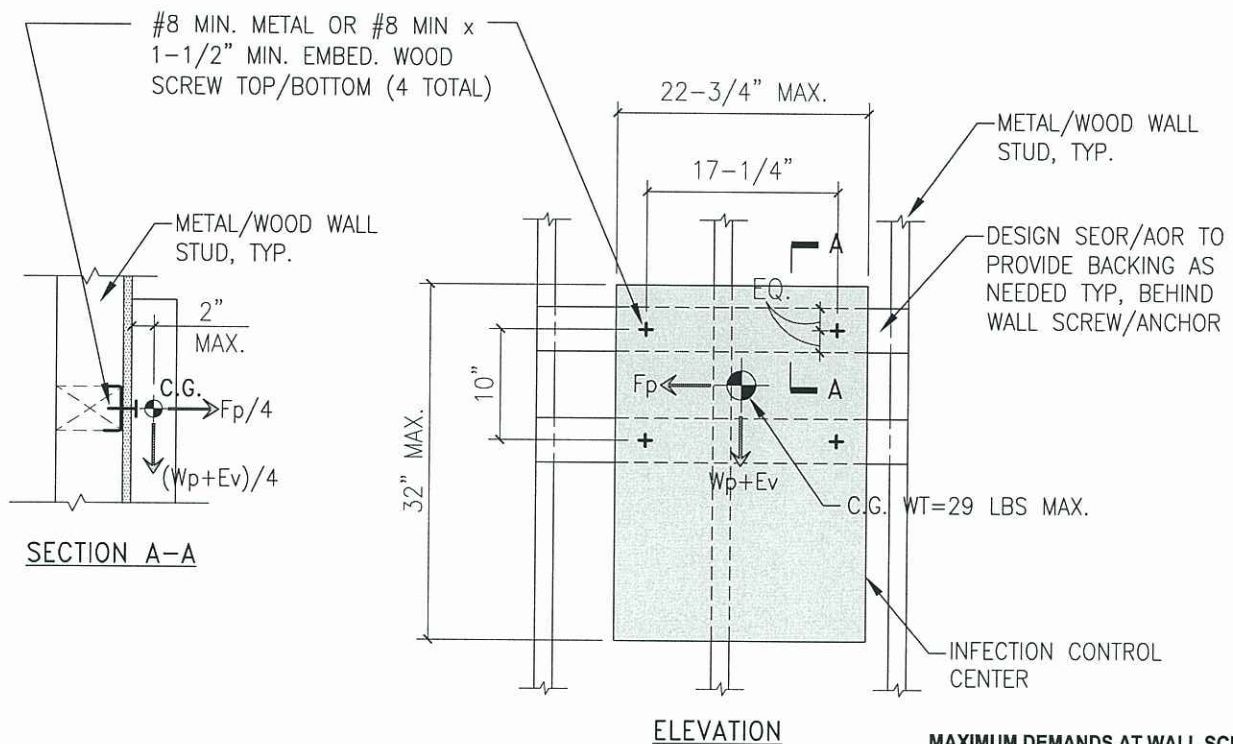
ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Designed By TY

Project # A8621021.00

Date 09/09/2009

ICX-1M (METAL/WOOD STUDWALL ATTACHMENT)



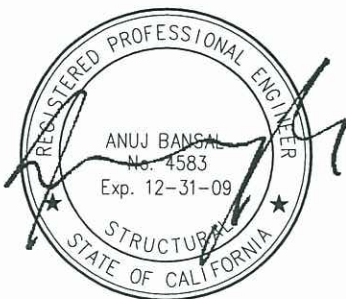
MAXIMUM DEMANDS AT WALL SCREWS

CASE 1: EQ FORCE PERPEND. TO WALL

TENSION = 49.9 LBS SHEAR = 15.1 LBS

CASE 2: EQ FORCE PARALLEL TO WALL

TENSION = 16.1 LBS SHEAR = 46.4 LBS





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

Sheet
9 of 20

PETER PEPPER PRODUCTS

INFECTION CONTROL CENTER

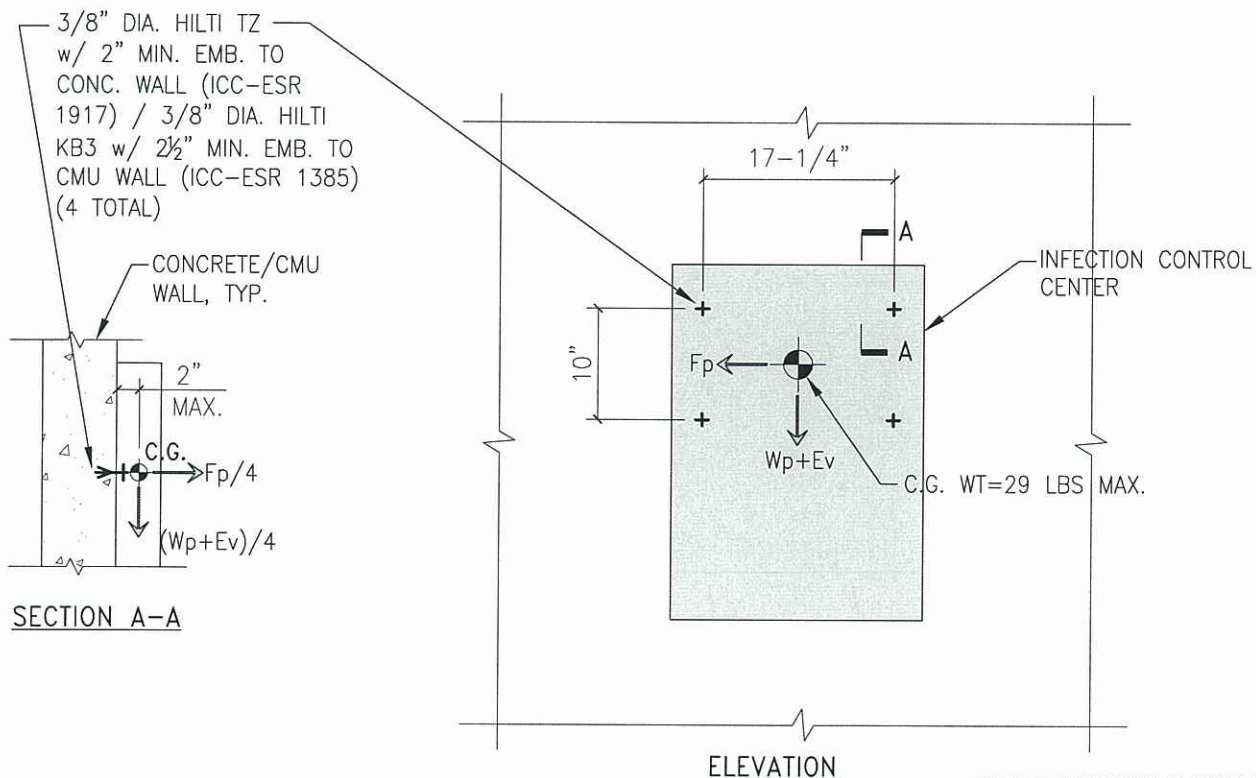
ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Designed By TY

Project # A8621021.00

Date 09/09/2009

ICX-1M (CONCRETE/CMU WALL ATTACHMENT)



MAXIMUM DEMANDS AT WALL ANCHORS

CASE 1: EQ FORCE PERPEND. TO WALL	
TENSION = 64.9 LBS	SHEAR = 19.6 LBS

CASE 2: EQ FORCE PARALLEL TO WALL	
TENSION = 21.1 LBS	SHEAR = 60.3 LBS

NOTES:

1. SEE PAGE 8 FOR INFO NOT SHOWN





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

Sheet
10 of 20

PETER PEPPER PRODUCTS

INFECTION CONTROL CENTER

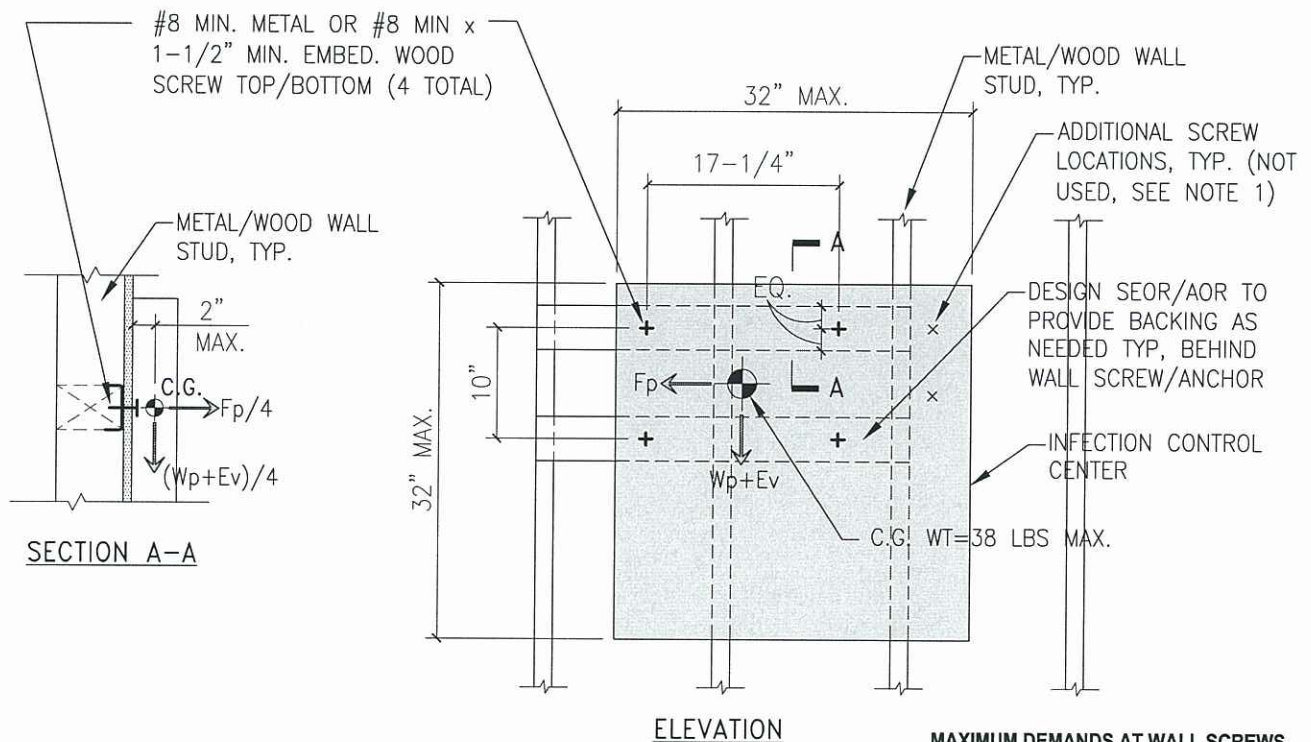
ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Designed By TY

Project # A8621021.00

Date 09/09/2009

ICX-2M (METAL/WOOD STUDWALL ATTACHMENT)



NOTES:

1. TO ACCOUNT FOR UNCERTAINTY OF OPERATING C.G. LOCATION, THE MAXIMUM DEMANDS SHOWN SHALL BE INCREASED BY 20% FOR DESIGNING BACKING STRUCTURAL MEMBERS.

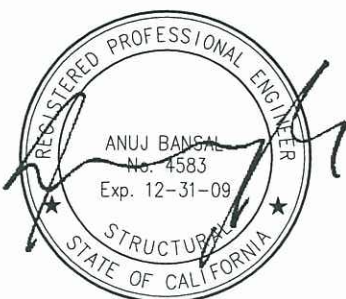
MAXIMUM DEMANDS AT WALL SCREWS

CASE 1: EQ FORCE PERPEND. TO WALL

TENSION = 49.9 LBS SHEAR = 15.1 LBS

CASE 2: EQ FORCE PARALLEL TO WALL

TENSION = 16.1 LBS SHEAR = 46.4 LBS





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

Sheet
11 of 20

PETER PEPPER PRODUCTS

Designed By TY

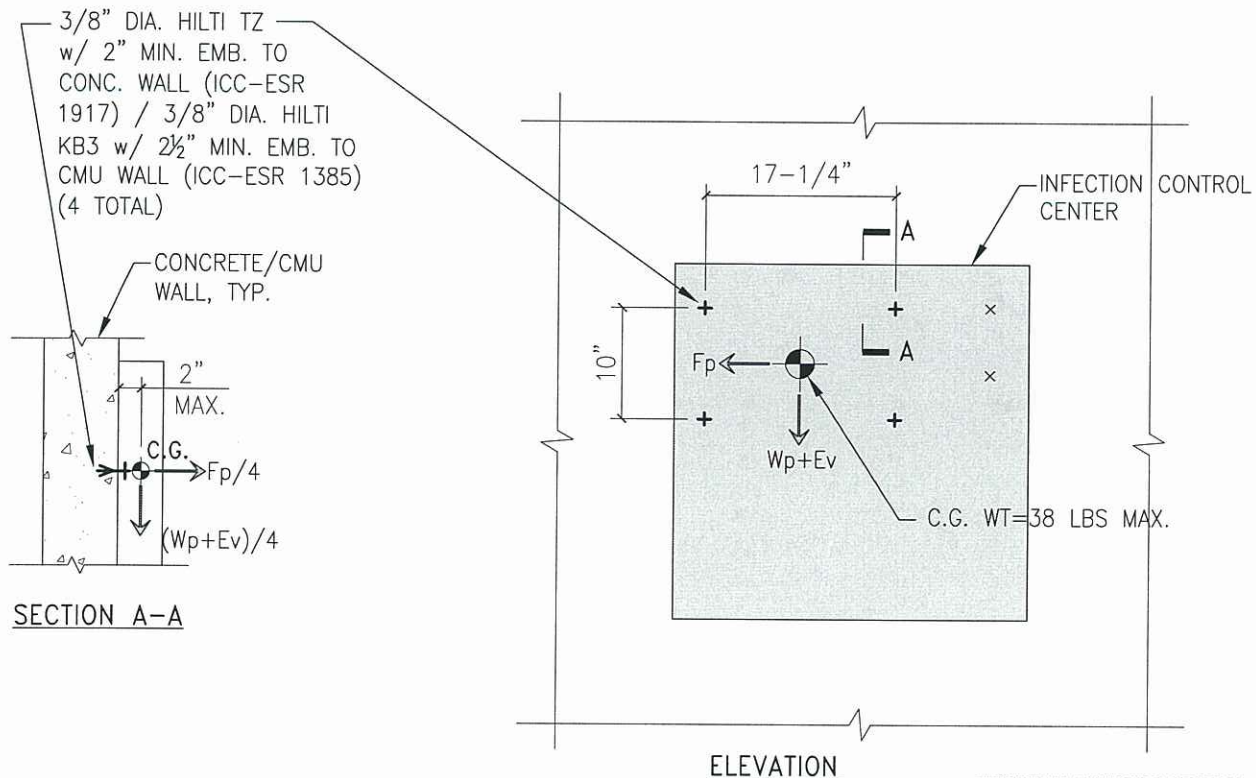
INFECTION CONTROL CENTER

Project # A8621021.00

ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Date 09/09/2009

ICX-2M (CONCRETE/CMU WALL ATTACHMENT)



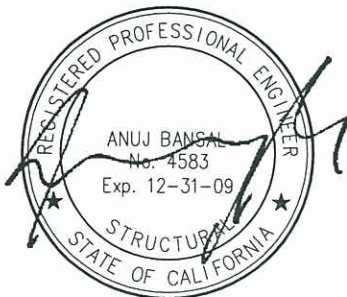
NOTES:

1. SEE PAGE 10 FOR INFO NOT SHOWN
2. SEE NOTE 1 ON PAGE 10

MAXIMUM DEMANDS AT WALL ANCHORS

CASE 1: EQ FORCE PERPEND. TO WALL	
TENSION = 64.9 LBS	SHEAR = 19.6 LBS

CASE 2: EQ FORCE PARALLEL TO WALL	
TENSION = 21.1 LBS	SHEAR = 60.3 LBS





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

Sheet
12 of 20

PETER PEPPER PRODUCTS

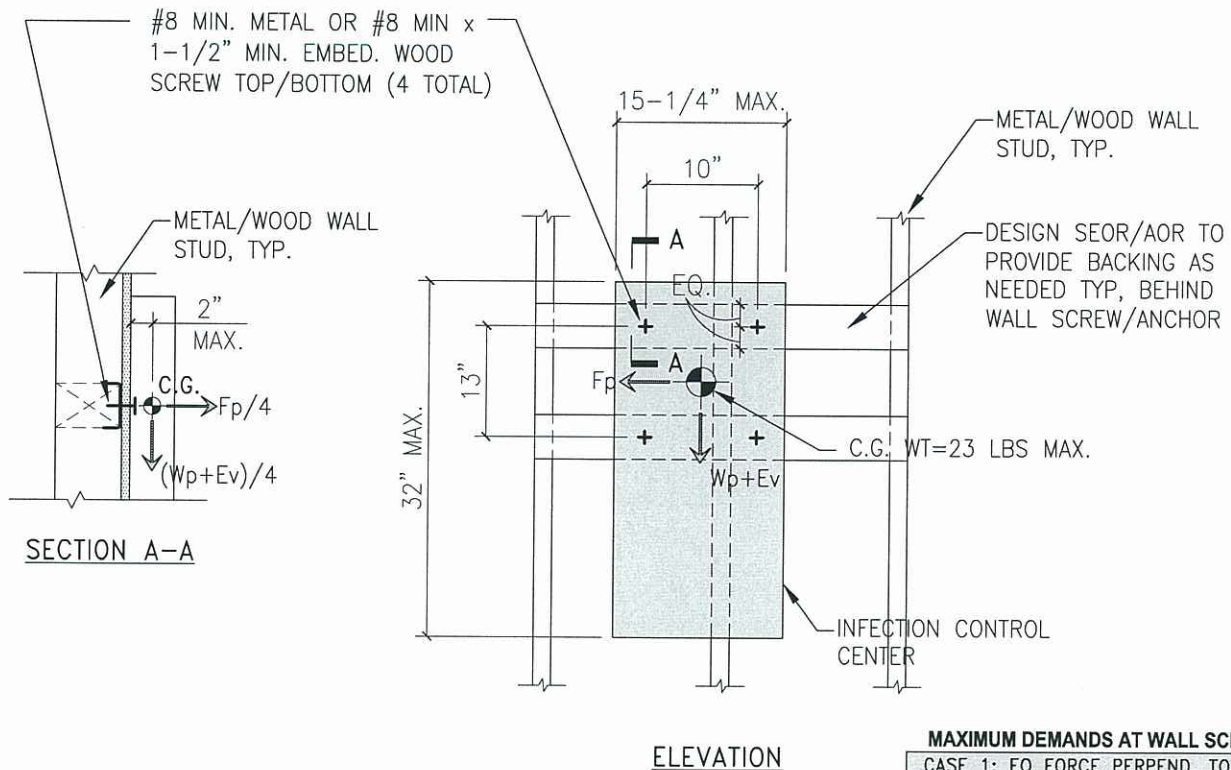
INFECTION CONTROL CENTER
ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Designed By TY

Project # A8621021.00

Date 09/09/2009

ICP-1M (METAL/WOOD STUDWALL ATTACHMENT)



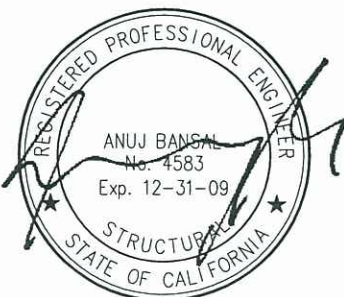
MAXIMUM DEMANDS AT WALL SCREWS

CASE 1: EQ FORCE PERPEND. TO WALL

TENSION = 38.3 LBS SHEAR = 11.9 LBS

CASE 2: EQ FORCE PARALLEL TO WALL

TENSION = 17.5 LBS SHEAR = 36.6 LBS



APPROVED
Fixed Equipment Anchorage
Office of Statewide Health Planning and Development



OPA-2343-07

Pre-approval Program Manager:
Anthony R. Pike
(315) 440-8470

Reviewed By: *George Zhu* September 24, 2009
Date



Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

Sheet
13 of 20

PETER PEPPER PRODUCTS

Designed By TY

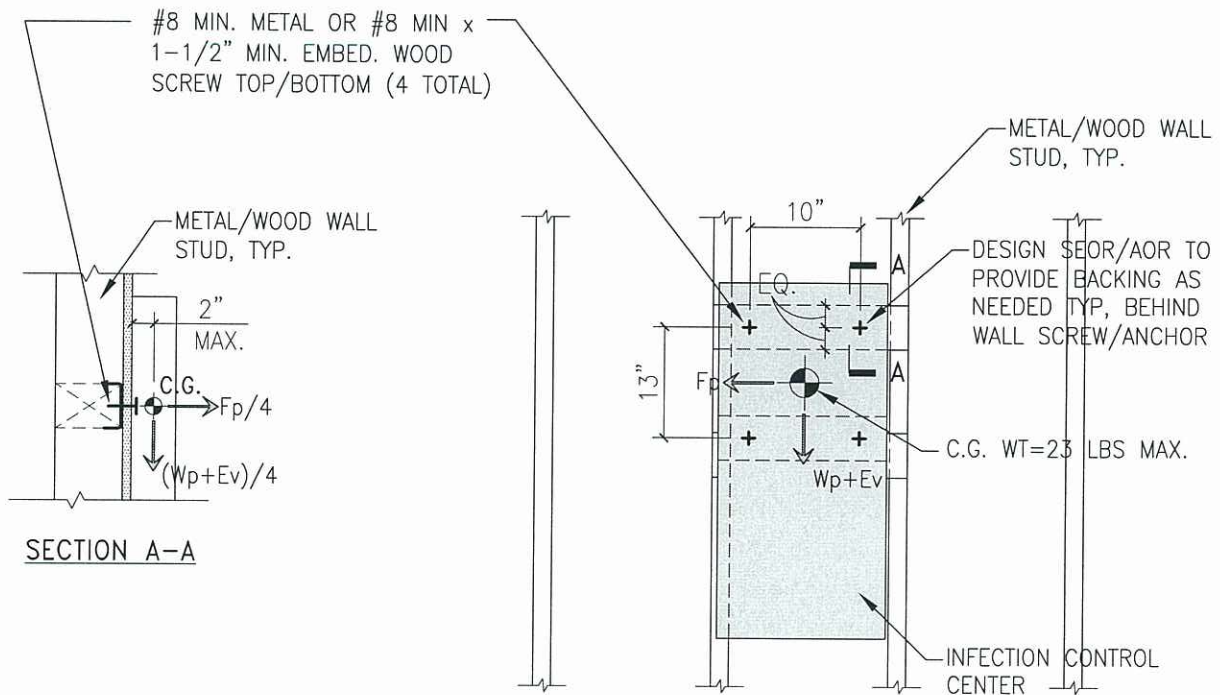
INFECTION CONTROL CENTER

Project # A8621021.00

ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Date 09/09/2009

ICP-1M (METAL/WOOD STUDWALL - ALTERNATE ATTACHMENT)



ELEVATION

MAXIMUM DEMANDS AT WALL SCREWS

CASE 1: EQ FORCE PERPEND. TO WALL

TENSION = 38.3 LBS SHEAR = 11.9 LBS

CASE 2: EQ FORCE PARALLEL TO WALL

TENSION = 17.5 LBS SHEAR = 36.6 LBS

NOTES:

1. SEE PAGE 12 FOR INFO NOT SHOWN





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

Sheet
14 of 20

PETER PEPPER PRODUCTS

Designed By TY

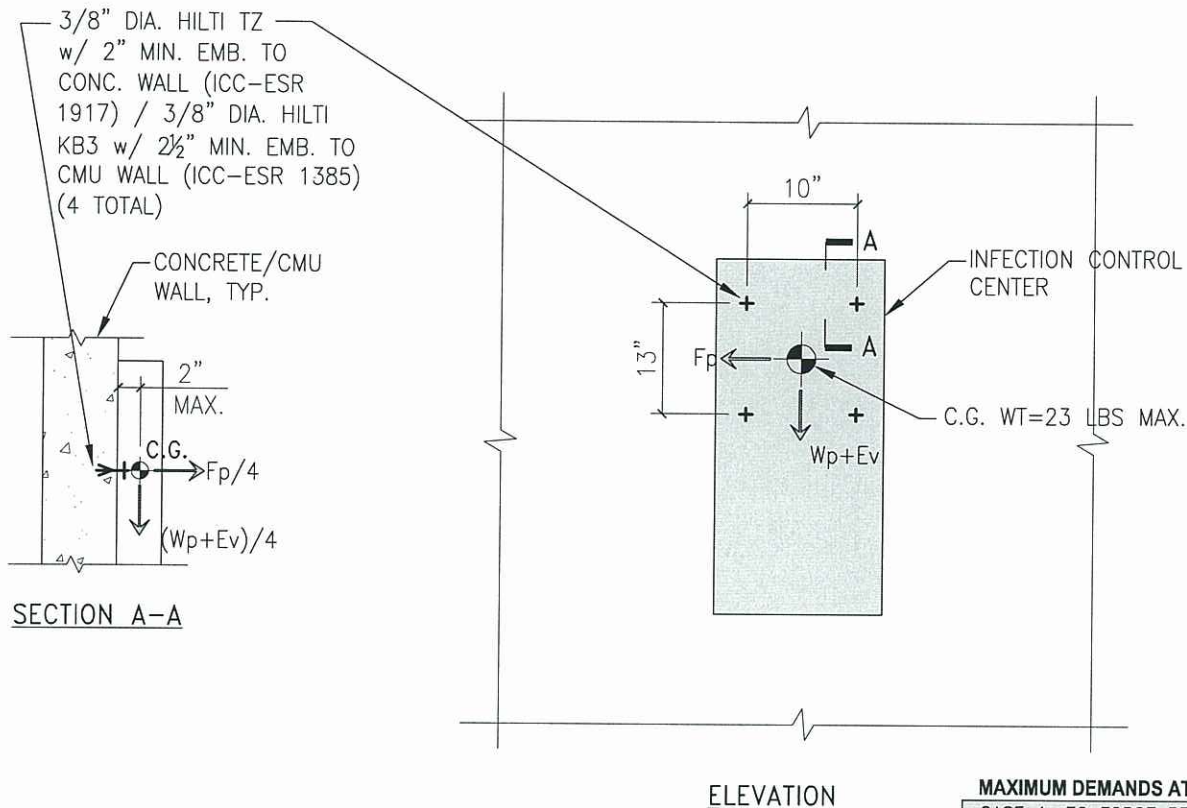
INFECTION CONTROL CENTER

Project # A8621021.00

ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Date 09/09/2009

ICP-1M (CONCRETE/CMU WALL ATTACHMENT)



MAXIMUM DEMANDS AT WALL ANCHORS

CASE 1: EQ FORCE PERPEND. TO WALL

TENSION = 49.8 LBS SHEAR = 15.5 LBS

CASE 2: EQ FORCE PARALLEL TO WALL

TENSION = 22.8 LBS SHEAR = 47.6 LBS

NOTES:

1. SEE PAGE 12 FOR INFO NOT SHOWN





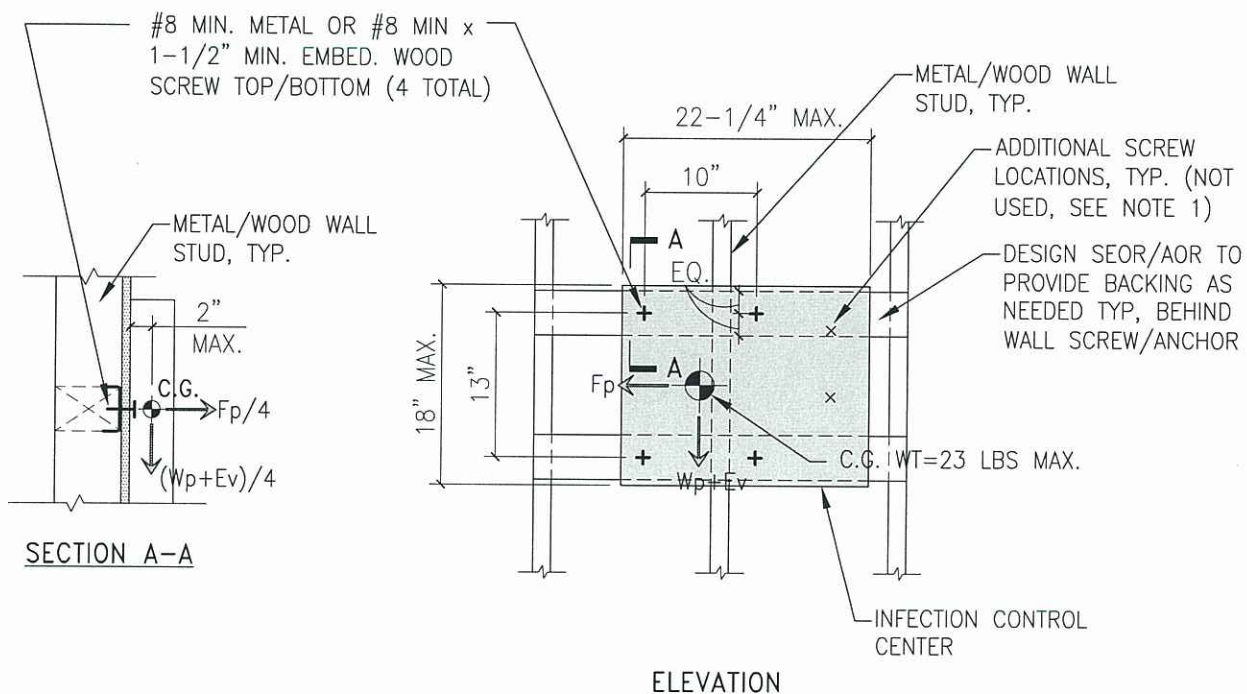
Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

Sheet
15 of 20

PETER PEPPER PRODUCTS
INFECTION CONTROL CENTER
ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Designed By TY
Project # A8621021.00
Date 09/09/2009

ICP-2 (METAL/WOOD STUDWALL ATTACHMENT)



NOTES:

1. TO ACCOUNT FOR UNCERTAINTY OF OPERATING C.G. LOCATION, THE MAXIMUM DEMANDS SHOWN SHALL BE INCREASED BY 40% FOR DESIGNING BACKING STRUCTURAL MEMBERS.

MAXIMUM DEMANDS AT WALL SCREWS

CASE 1: EQ FORCE PERPEND. TO WALL	
TENSION = 38.3 LBS	SHEAR = 11.9 LBS
CASE 2: EQ FORCE PARALLEL TO WALL	
TENSION = 17.5 LBS	SHEAR = 36.6 LBS





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

Sheet
16 of 20

PETER PEPPER PRODUCTS

Designed By TY

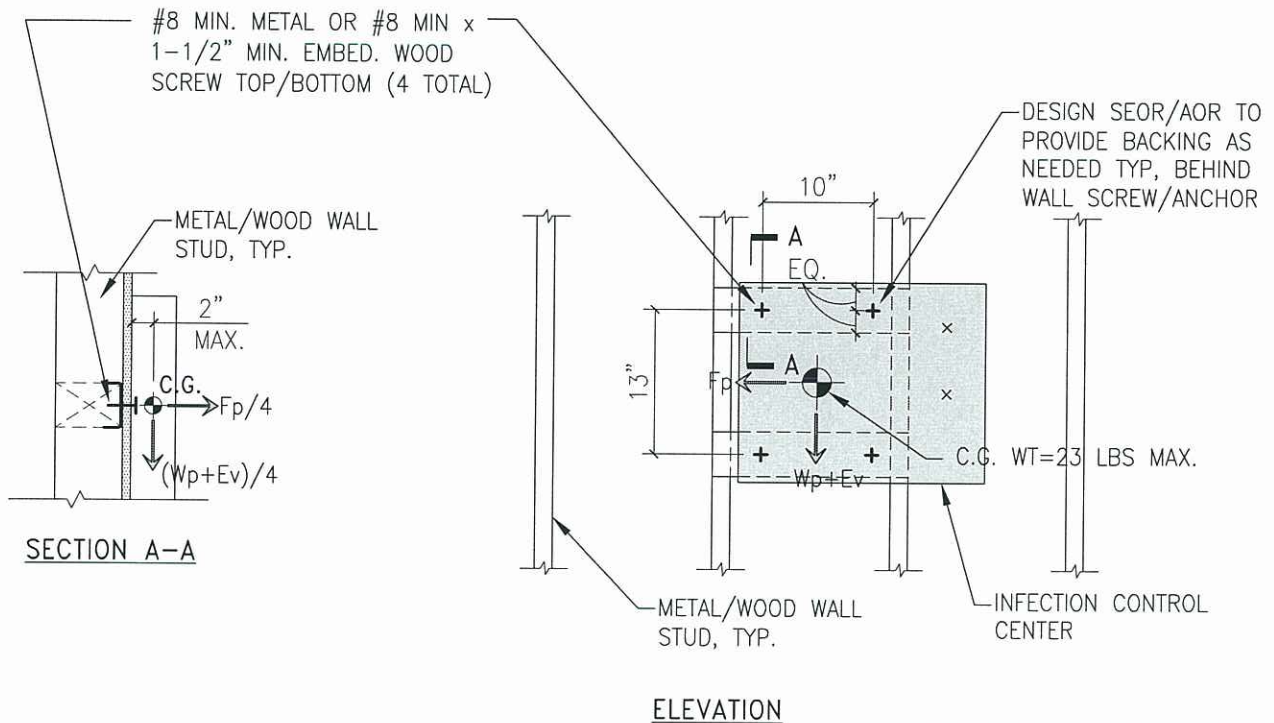
INFECTION CONTROL CENTER

Project # A8621021.00

ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Date 09/09/2009

ICP-2 (METAL/WOOD STUDWALL - ALTERNATE ATTACHMENT)



NOTES:

1. SEE PAGE 15 FOR INFO NOT SHOWN
2. SEE NOTE 1 ON PAGE 15

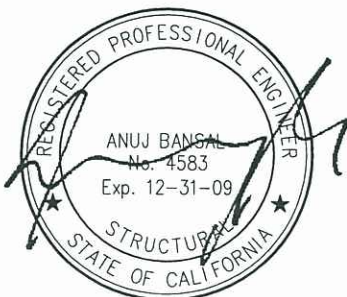
MAXIMUM DEMANDS AT WALL SCREWS

CASE 1: EQ FORCE PERPEND. TO WALL

TENSION = 38.3 LBS SHEAR = 11.9 LBS

CASE 2: EQ FORCE PARALLEL TO WALL

TENSION = 17.5 LBS SHEAR = 36.6 LBS





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

Sheet
17 of 20

PETER PEPPER PRODUCTS

INFECTION CONTROL CENTER

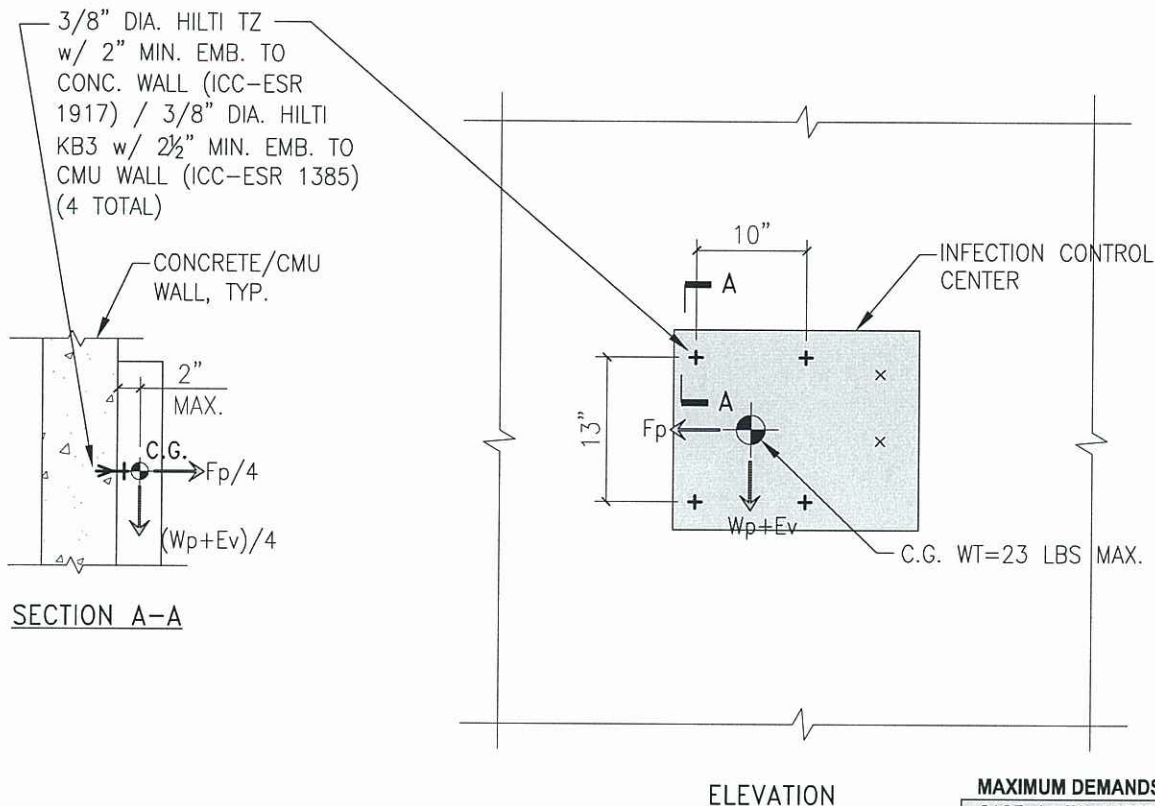
ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Designed By TY

Project # A8621021.00

Date 09/09/2009

ICP-2 (CONCRETE/CMU WALL ATTACHMENT)



NOTES:

1. SEE PAGE 15 FOR INFO NOT SHOWN
2. SEE NOTE 1 ON PAGE 15

MAXIMUM DEMANDS AT WALL ANCHORS

CASE 1: EQ FORCE PERPEND. TO WALL

TENSION = 49.8 LBS SHEAR = 15.5 LBS

CASE 2: EQ FORCE PARALLEL TO WALL

TENSION = 22.8 LBS SHEAR = 47.6 LBS





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

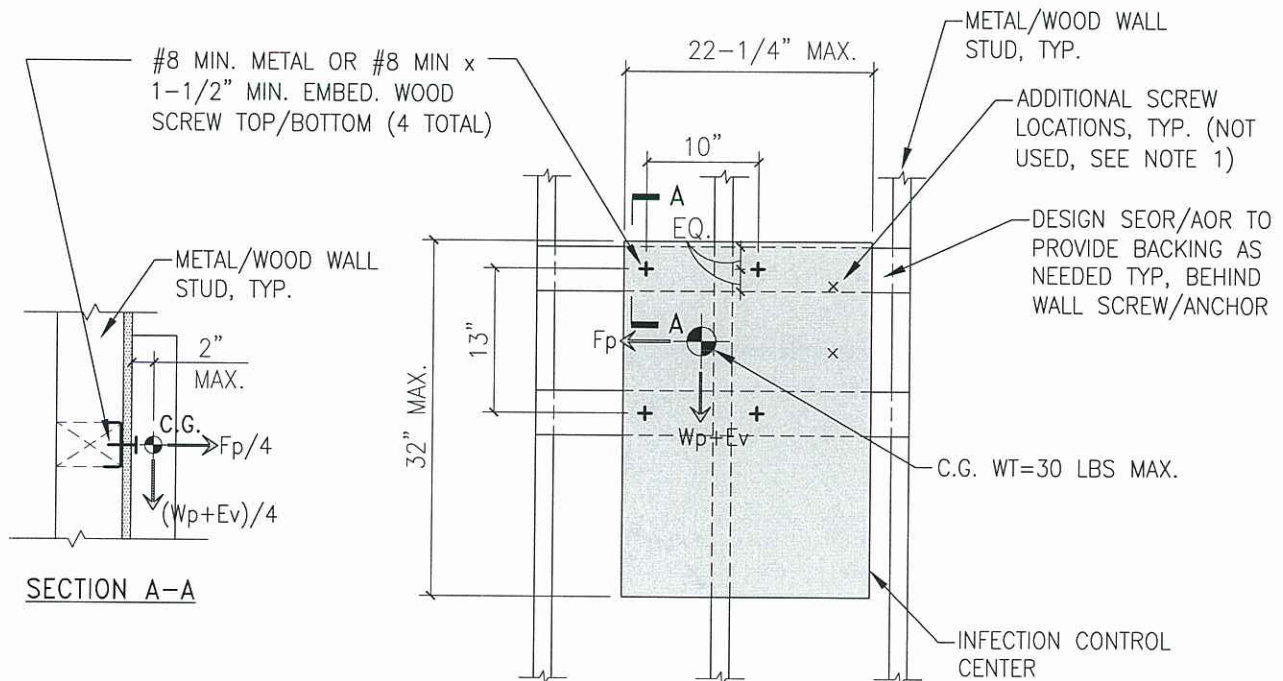
Sheet
18 of 20

PETER PEPPER PRODUCTS

INFECTION CONTROL CENTER
ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Designed By	TY
Project #	A8621021.00
Date	09/09/2009

ICP-2M (METAL/WOOD STUDWALL ATTACHMENT)



NOTES:

1. TO ACCOUNT FOR UNCERTAINTY OF OPERATING C.G. LOCATION, THE MAXIMUM DEMANDS SHOWN SHALL BE INCREASED BY 40% FOR DESIGNING BACKING STRUCTURAL MEMBERS.

ELEVATION

MAXIMUM DEMANDS AT WALL SCREWS

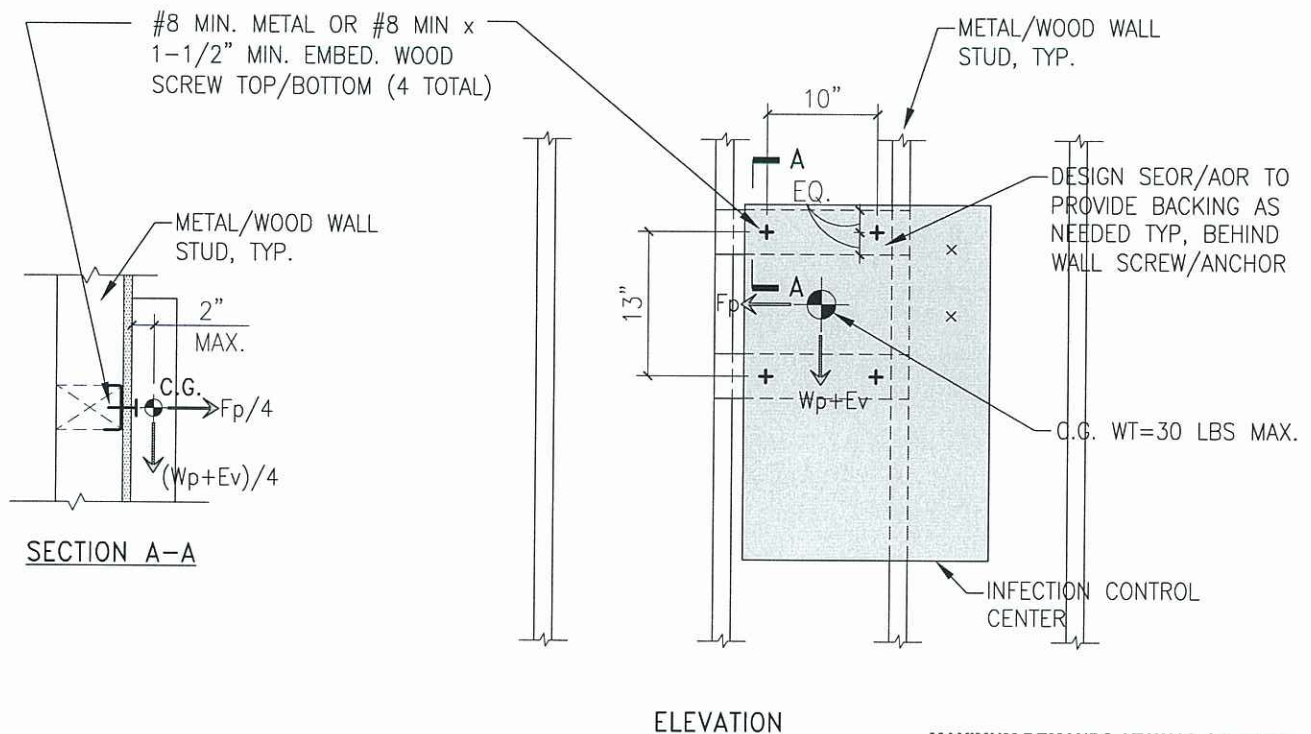
CASE 1: EQ FORCE PERPEND. TO WALL

TENSION = 38.3 LBS SHEAR = 11.9 LBS

CASE 2: EQ FORCE PARALLEL TO WALL

TENSION = 17.5 LBS SHEAR = 36.6 LBS





CASE 1: EQ FORCE PERPEND. TO WALL	
TENSION = 38.3 LBS	SHEAR = 11.9 LBS
CASE 2: EQ FORCE PARALLEL TO WALL	
TENSION = 17.5 LBS	SHEAR = 36.6 LBS





Degenkolb Engineers
300 S. Grand Ave. #1115, Los Angeles, CA 90071
(213) 596-5000 - (213) 596-5960

Sheet

20 of 20

PETER PEPPER PRODUCTS

Designed By TY

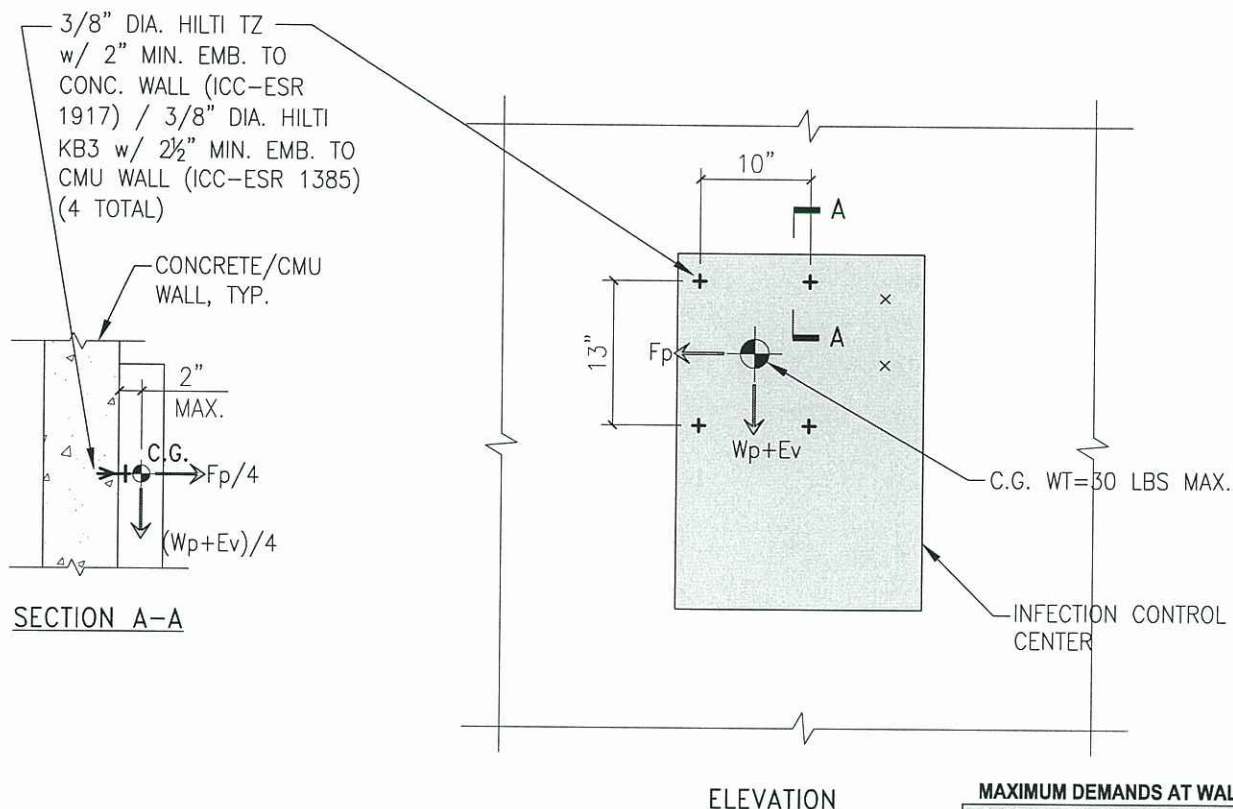
INFECTION CONTROL CENTER

Project # A8621021.00

ICX-1, ICX-2, ICX-1M, ICX-2M, ICP-1M, ICP-2M, ICP-2

Date 09/09/2009

ICP-2M (CONCRETE/CMU WALL ATTACHMENT)



NOTES:

1. SEE PAGE 18 FOR INFO NOT SHOWN
2. SEE NOTE 1 ON PAGE 18

MAXIMUM DEMANDS AT WALL ANCHORS

CASE 1: EQ FORCE PERPEND. TO WALL

TENSION = 49.8 LBS SHEAR = 15.5 LBS

CASE 2: EQ FORCE PARALLEL TO WALL

TENSION = 22.8 LBS SHEAR = 47.6 LBS



APPROVED
Fixed Equipment Anchorage
Office of Statewide Health Planning and Development



OPA-2343-07

Pre-approval Program Manager:
Anthony R. Pike
(315) 440-8470

George Zhu September 24, 2009
Reviewed By: George Zhu Date