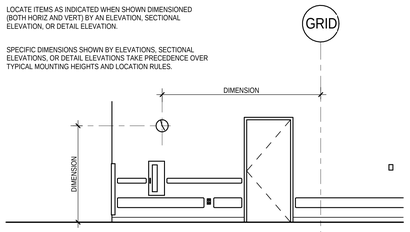
TYPICAL RULES FOR DETERMINING MOUNTING HEIGHTS, LOCATIONS, AND CONFIGURATIONS

LOCATE ITEMS AS INDICATED WHEN SHOWN DIMENSIONED (BOTH HORIZONTAL AND VERTI) BY AN ELEVATION, SECTIONAL ELEVATION, OR DETAIL ELEVATION.

SPECIFIC DIMENSIONS SHOWN BY ELEVATIONS, SECTIONAL ELEVATIONS, OR DETAIL ELEVATIONS TAKE PRECEDENCE OVER TYPICAL MOUNTING HEIGHTS AND LOCATION RULES.



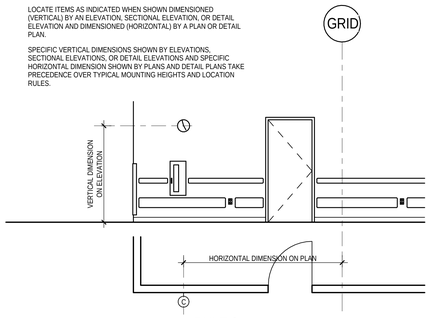
SPECIFIC MOUNTING DIMENSIONS SHOWN BY ELEVATIONS, SECTIONAL ELEVATIONS, OR DETAIL ELEVATIONS TAKE PRECEDENCE OVER CONFLICTING DIMENSIONS, IF ANY, SHOWN ON PLANS OR DETAIL PLANS.

RULE 1

WHEN COMPLETELY DIMENSIONED IN ELEVATION

LOCATE ITEMS AS INDICATED WHEN SHOWN DIMENSIONED (VERTICAL) BY AN ELEVATION, SECTIONAL ELEVATION, OR DETAIL ELEVATION AND DIMENSIONED (HORIZONTAL) BY A PLAN OR DETAIL PLAN.

SPECIFIC VERTICAL DIMENSIONS SHOWN BY ELEVATIONS, SECTIONAL ELEVATIONS, OR DETAIL ELEVATIONS AND SPECIFIC HORIZONTAL DIMENSION SHOWN BY PLANS AND DETAIL PLANS TAKE PRECEDENCE OVER TYPICAL MOUNTING HEIGHTS AND LOCATION RULES.

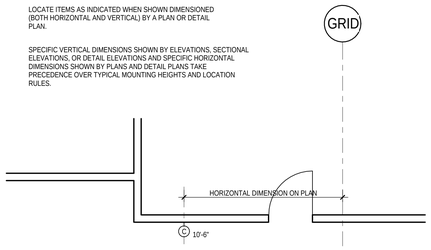


RULE 2

WHEN COMPLETELY DIMENSIONED BY COMBINATION OF PLAN AND ELEVATION

LOCATE ITEMS AS INDICATED WHEN SHOWN DIMENSIONED (BOTH HORIZONTAL AND VERTICAL) BY A PLAN OR DETAIL PLAN.

SPECIFIC VERTICAL DIMENSIONS SHOWN BY ELEVATIONS, SECTIONAL ELEVATIONS, OR DETAIL ELEVATIONS AND SPECIFIC HORIZONTAL DIMENSIONS SHOWN BY PLANS AND DETAIL PLANS TAKE PRECEDENCE OVER TYPICAL MOUNTING HEIGHTS AND LOCATION RULES.



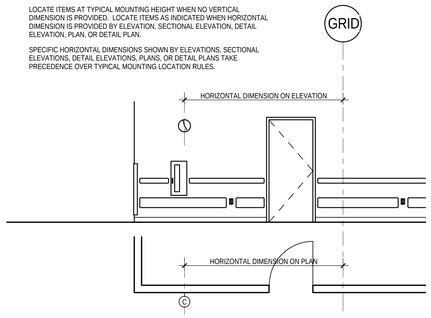
NON-TYPICAL MOUNTING HEIGHTS MAY BE INDICATED BY SYMBOL (AS SHOWN), BY KEYED NOTE, OR BY NOTATION ON PLANS.

RULE 3

WHEN COMPLETELY DIMENSIONED ON PLANS

LOCATE ITEMS AT TYPICAL MOUNTING HEIGHT WHEN NO VERTICAL DIMENSION IS PROVIDED. LOCATE ITEMS AS INDICATED WHEN HORIZONTAL DIMENSION IS PROVIDED BY ELEVATION, SECTIONAL ELEVATION, DETAIL ELEVATION, PLAN, OR DETAIL PLAN.

SPECIFIC HORIZONTAL DIMENSIONS SHOWN BY ELEVATIONS, SECTIONAL ELEVATIONS, DETAIL ELEVATIONS, PLANS, OR DETAIL PLANS TAKE PRECEDENCE OVER TYPICAL MOUNTING LOCATION RULES.

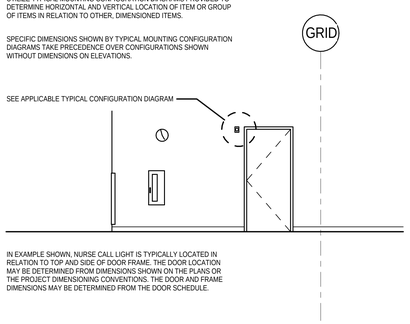


RULE 4

WHEN DIMENSIONED HORIZONTALLY IN PLAN OR ELEVATION, BUT NOT DIMENSIONED VERTICALLY

UTILIZE TYPICAL MOUNTING CONFIGURATION DIAGRAMS PROVIDED TO DETERMINE HORIZONTAL AND VERTICAL LOCATION OF ITEM OR GROUP OF ITEMS IN RELATION TO OTHER, DIMENSIONED ITEMS.

SPECIFIC DIMENSIONS SHOWN BY TYPICAL MOUNTING CONFIGURATION DIAGRAMS TAKE PRECEDENCE OVER CONFIGURATIONS SHOWN WITHOUT DIMENSIONS ON ELEVATIONS.



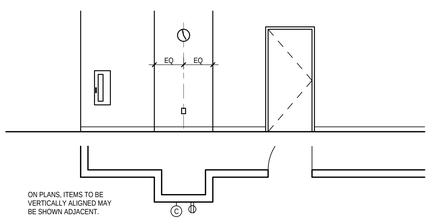
IN EXAMPLE SHOWN, NURSE CALL LIGHT IS TYPICALLY LOCATED IN RELATION TO TOP AND SIDE OF DOOR FRAME. THE DOOR LOCATION MAY BE DETERMINED FROM DIMENSIONS SHOWN ON THE PLANS OR THE PROJECT DIMENSIONING CONVENTIONS. THE DOOR AND FRAME DIMENSIONS MAY BE DETERMINED FROM THE DOOR SCHEDULE.

RULE 5

WHEN NO DIMENSIONS ARE PROVIDED IN PLANS OR ELEVATIONS

WHEN NOT DIMENSIONED AND SHOWN LOCATED ON A COLUMN OR PILASTER, AND WHEN NO OTHER TYPICAL CONFIGURATION DIAGRAM APPLIES: HORIZONTALLY CENTER ITEM ON FACE OF COLUMN OR PILASTER. ALIGN VERTICALLY CENTERS OF MULTIPLE ITEMS HAVING DIFFERING TYPICAL MOUNTING HEIGHTS.

WHEN MULTIPLE ITEMS HAVING THE SAME TYP MOUNTING HEIGHT ARE INDICATED, HORIZONTALLY CENTER GROUP OF ITEMS ON FACE OF COLUMN OR PILASTER (SEE RULE 7).

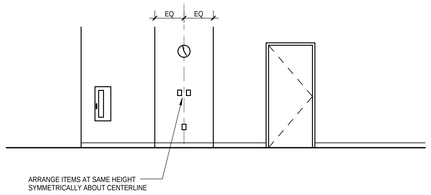


RULE 6

NOT DIMENSIONED AND LOCATED ON COLUMN OR PILASTER

WHEN NOT DIMENSIONED AND SHOWN LOCATED ON A COLUMN OR PILASTER, AND WHEN NO OTHER TYPICAL CONFIGURATION DIAGRAM APPLIES: HORIZONTALLY CENTER GROUP OF SIMILAR ITEMS HAVING THE SAME MOUNTING HEIGHT(S) ABOUT THE CENTERLINE OF THE COLUMN OR PILASTER.

WHEN APPLICABLE, COMBINE THIS RULE WITH RULE 6 TO SYMMETRICALLY ARRANGE GROUPS OF ITEMS HAVING BOTH DIFFERING AND SIMILAR MOUNTING HEIGHTS.

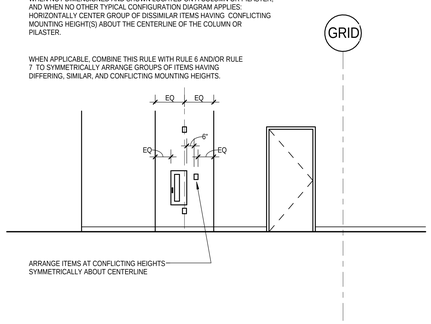


RULE 7

NOT DIMENSIONED AND LOCATED ON COLUMN OR PILASTER

WHEN NOT DIMENSIONED AND SHOWN LOCATED ON A COLUMN OR PILASTER, AND WHEN NO OTHER TYPICAL CONFIGURATION DIAGRAM APPLIES: HORIZONTALLY CENTER GROUP OF DISSIMILAR ITEMS HAVING CONFLICTING MOUNTING HEIGHT(S) ABOUT THE CENTERLINE OF THE COLUMN OR PILASTER.

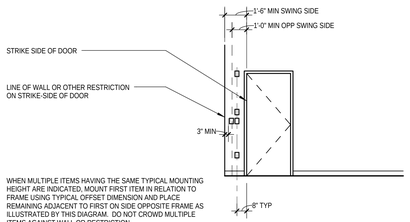
WHEN APPLICABLE, COMBINE THIS RULE WITH RULE 6 AND/OR RULE 7 TO SYMMETRICALLY ARRANGE GROUPS OF ITEMS HAVING DIFFERING, SIMILAR, AND CONFLICTING MOUNTING HEIGHTS.



RULE 8

NOT DIMENSIONED AND LOCATED ON COLUMN OR PILASTER

WHEN NOT DIMENSIONED AND SHOWN LOCATED ADJACENT TO STRIKE SIDE OF DOOR, AND WHEN STRIKE-SIDE CLEARANCE IS BETWEEN 12 INCHES AND 18 INCHES, AND WHEN NO OTHER TYPICAL CONFIGURATION DIAGRAM APPLIES: MOUNT ITEMS IN RELATION TO FRAME USING TYPICAL OFFSET DIMENSION. VERTICALLY ALIGN CENTERS OF ITEMS MOUNTED AT DIFFERENT HEIGHTS.



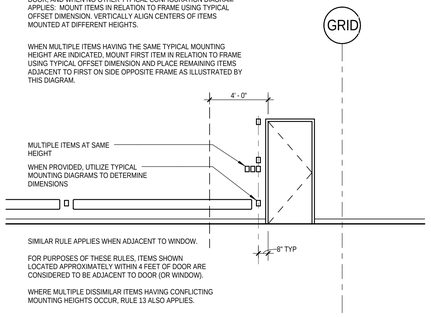
WHEN MULTIPLE ITEMS HAVING THE SAME TYPICAL MOUNTING HEIGHT ARE INDICATED, MOUNT FIRST ITEM IN RELATION TO FRAME USING TYPICAL OFFSET DIMENSION AND PLACE REMAINING ITEMS ADJACENT TO FIRST ON SIDE OPPOSITE FRAME AS ILLUSTRATED BY THIS DIAGRAM. DO NOT CROWD MULTIPLE ITEMS AGAINST WALL OR RESTRICTION.

RULE 9

NOT DIMENSIONED AND LOCATED ADJACENT TO MINIMUM STRIKE-SIDE OF DOOR

WHEN NOT DIMENSIONED AND SHOWN LOCATED ADJACENT TO DOOR, AND WHEN NO OTHER TYPICAL CONFIGURATION DIAGRAM APPLIES: MOUNT ITEMS IN RELATION TO FRAME USING TYPICAL OFFSET DIMENSION. VERTICALLY ALIGN CENTERS OF ITEMS MOUNTED AT DIFFERENT HEIGHTS.

WHEN MULTIPLE ITEMS HAVING THE SAME TYPICAL MOUNTING HEIGHT ARE INDICATED, MOUNT FIRST ITEM IN RELATION TO FRAME USING TYPICAL OFFSET DIMENSION AND PLACE REMAINING ITEMS ADJACENT TO FIRST ON SIDE OPPOSITE FRAME AS ILLUSTRATED BY THIS DIAGRAM.



SIMILAR RULE APPLIES WHEN ADJACENT TO WINDOW.

FOR PURPOSES OF THESE RULES, ITEMS SHOWN LOCATED APPROXIMATELY WITHIN 4 FEET OF DOOR ARE CONSIDERED TO BE ADJACENT TO DOOR (OR WINDOW).

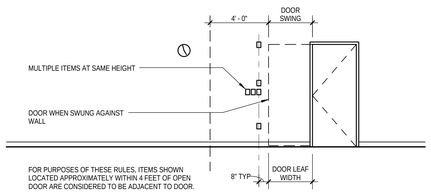
WHERE MULTIPLE DISSIMILAR ITEMS HAVING CONFLICTING MOUNTING HEIGHTS OCCUR, RULE 13 ALSO APPLIES.

RULE 10

NOT DIMENSIONED AND LOCATED ADJACENT TO DOOR OR WINDOW

WHEN NOT DIMENSIONED AND SHOWN LOCATED ADJACENT TO DOOR, AND WHEN NO OTHER TYPICAL CONFIGURATION DIAGRAM APPLIES: MOUNT ITEMS IN RELATION TO SWING USING TYP OFFSET DIMENSION. VERTICALLY ALIGN CENTERS OF ITEMS MOUNTED AT DIFFERENT HEIGHTS.

WHEN MULTIPLE ITEMS HAVING THE SAME TYPICAL MOUNTING HEIGHT ARE INDICATED, MOUNT FIRST ITEM IN RELATION TO SWING USING TYPICAL OFFSET DIMENSION AND PLACE REMAINING ITEMS ADJACENT TO FIRST ON SIDE OPPOSITE FRAME AS ILLUSTRATED BY THIS DIAGRAM.



FOR PURPOSES OF THESE RULES, ITEMS SHOWN LOCATED APPROXIMATELY WITHIN 4 FEET OF OPEN DOOR ARE CONSIDERED TO BE ADJACENT TO DOOR.

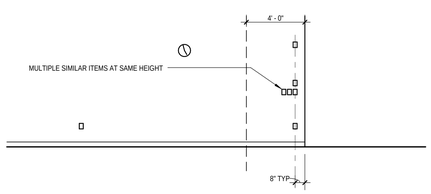
WHERE MULTIPLE DISSIMILAR ITEMS HAVING CONFLICTING MOUNTING HEIGHTS OCCUR, RULE 13 ALSO APPLIES.

RULE 11

NOT DIMENSIONED AND LOCATED ADJACENT TO DOOR AND ON WALL AGAINST WHICH DOOR SWINGS

WHEN NOT DIMENSIONED AND SHOWN LOCATED ADJACENT TO CHANGE IN PLANE OF WALL, AND WHEN NO OTHER TYPICAL CONFIGURATION DIAGRAM APPLIES: MOUNT ITEMS IN RELATION TO PLANE CHANGE USING TYPICAL OFFSET DIMENSION. VERTICALLY ALIGN CENTERS OF ITEMS MOUNTED AT DIFFERENT HEIGHTS.

WHEN MULTIPLE SIMILAR ITEMS HAVING THE SAME TYPICAL MOUNTING HEIGHT ARE INDICATED, MOUNT FIRST ITEM IN RELATION TO PLANE CHANGE USING TYPICAL OFFSET DIMENSION AND PLACE REMAINING ITEMS ADJACENT TO FIRST ON SIDE OPPOSITE PLANE CHANGE AS ILLUSTRATED BY THIS DIAGRAM.

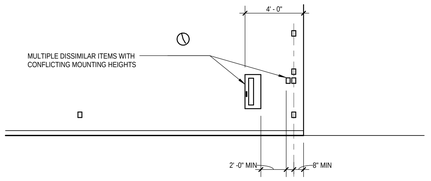


FOR PURPOSES OF THESE RULES, ITEMS SHOWN LOCATED APPROXIMATELY WITHIN 4 FEET OF PLANE CHANGE ARE CONSIDERED TO BE ADJACENT TO CHANGE IN PLANE.

RULE 12

WHEN NOT DIMENSIONED AND LOCATED ADJACENT TO CHANGE IN WALL DIRECTION

WHEN NOT DIMENSIONED AND SHOWN LOCATED ADJACENT TO CHANGE IN PLANE OF WALL, AND WHEN NO OTHER TYPICAL CONFIGURATION DIAGRAM APPLIES: MOUNT ITEMS IN RELATION TO PLANE CHANGE USING TYPICAL OFFSET DIMENSION. SEPARATE DISSIMILAR ITEM FROM GROUP OF SIMILAR ITEMS BY 24" MINIMUM AS ILLUSTRATED BY THIS DIAGRAM.



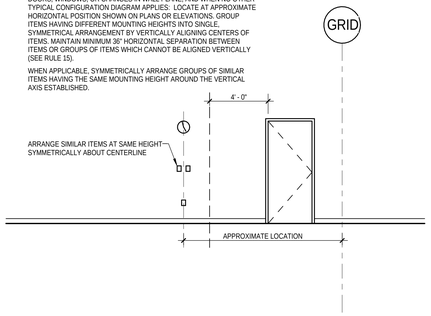
FOR PURPOSES OF THESE RULES, ITEMS SHOWN LOCATED APPROXIMATELY WITHIN 4 FEET OF PLANE CHANGE ARE CONSIDERED TO BE ADJACENT TO CHANGE IN PLANE.

RULE 13

WHEN NOT DIMENSIONED AND LOCATED ADJACENT TO CHANGE IN WALL DIRECTION

WHEN NOT DIMENSIONED AND SHOWN ON A WALL NOT ADJACENT TO DOORS, WINDOWS, OR CHANGES IN WALL PLANE, AND WHEN NO OTHER TYPICAL CONFIGURATION DIAGRAM APPLIES: LOCATE AT APPROXIMATE HORIZONTAL POSITION SHOWN ON PLANS OR ELEVATIONS. GROUP ITEMS HAVING DIFFERENT MOUNTING HEIGHTS INTO SINGLE, SYMMETRICAL ARRANGEMENT BY VERTICALLY ALIGNING CENTERS OF ITEMS. MAINTAIN MINIMUM 36" HORIZONTAL SEPARATION BETWEEN ITEMS OR GROUPS OF ITEMS WHICH CANNOT BE ALIGNED VERTICALLY (SEE RULE 15).

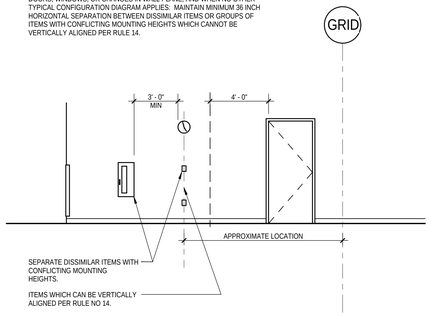
WHEN APPLICABLE, SYMMETRICALLY ARRANGE GROUPS OF SIMILAR ITEMS HAVING THE SAME MOUNTING HEIGHT AROUND THE VERTICAL AXIS ESTABLISHED.



RULE 14

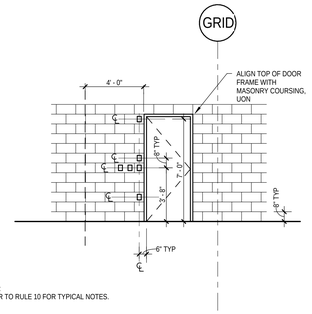
NOT DIMENSIONED AND LOCATED ON OPEN WALL

WHEN NOT DIMENSIONED AND SHOWN ON A WALL NOT ADJACENT TO DOORS, WINDOWS, OR CHANGES IN WALL PLANE, AND WHEN NO OTHER TYPICAL CONFIGURATION DIAGRAM APPLIES: MAINTAIN MINIMUM 36 INCH HORIZONTAL SEPARATION BETWEEN DISSIMILAR ITEMS OR GROUPS OF ITEMS WITH CONFLICTING MOUNTING HEIGHTS WHICH CANNOT BE VERTICALLY ALIGNED PER RULE 14.



RULE 15

NOT DIMENSIONED AND LOCATED ON OPEN WALL



NOTE:
REFER TO RULE 10 FOR TYPICAL NOTES.

RULE 16

NOT DIMENSIONED AND LOCATED ADJACENT TO DOOR OR WINDOW IN MASONRY

GENERAL MOUNTING NOTES

A. THE A-SERIES DRAWINGS ESTABLISH AND GOVERN THE FINISHED APPEARANCE AND LOCATION OF THE EXPOSED WORK OF ALL TRADES, INCLUDING THAT WHICH IS ILLUSTRATED PRIMARILY ON DRAWINGS OF OTHER DISCIPLINES. LOCATIONS SHOWN ON DRAWINGS OF OTHER DISCIPLINES ARE SCHEMATIC, UNLESS NOTED OTHERWISE ON THE A-SERIES DRAWINGS. THE A-SERIES DRAWINGS TAKE PRECEDENCE FOR DETERMINING THE FINISHED APPEARANCE AND LOCATION OF ALL PARTS OF THE WORK.

EXCEPTION: DIMENSIONED LOCATIONS SHOWN ON DRAWINGS OF OTHER DISCIPLINES SHALL GOVERN ONLY WHERE:

1. SPECIFICALLY AND INDIVIDUALLY INDICATED BY SYMBOL, KEYED NOTE, OR NOTATION ON THE A-SERIES DRAWINGS.

2. OCCURRING WITHIN A ROOM OR OTHER IDENTIFIABLE SPACE FOR WHICH A-SERIES SHEET OR SCHEDULE NOTES INDICATE THAT DIMENSIONS PROVIDED ELSEWHERE SHALL GOVERN.

B. THE PURPOSE OF THIS SHEET IS TO ILLUSTRATE THE TYPICAL RULES WHICH GOVERN THE LOCATION, CONFIGURATION IN RELATIONSHIP TO OTHER ELEMENTS OF THE WORK, AND FINISHED ALIGNMENT OF ALL ITEMS OCCURRING ON VERTICAL SURFACES OF THE PROJECT.

C. THE A-SERIES FLOOR PLANS, REFLECTED CEILING PLANS, SECTIONS, ELEVATIONS, AND DETAILS ILLUSTRATE THE DIMENSIONED LOCATION OF MANY - BUT NOT ALL - EXPOSED PARTS OF THE WORK. APPLY THE RULES ON THIS SHEET - IN ORDER - TO DETERMINE THE LOCATION OF EXPOSED PART OF THE WORK.

1. WHEN UNIQUELY AND SPECIFICALLY DIMENSIONED ON THE A-SERIES PLANS, SECTIONS, OR ELEVATIONS (OR COMBINATION THEREOF), LOCATE AS DIMENSIONED (SEE RULES 1 THRU 3).

2. WHEN SHOWN WITH HORIZONTAL DIMENSION ON THE A-SERIES PLANS, SECTIONS, OR ELEVATIONS, LOCATE HORIZONTALLY AS DIMENSIONED AND AT THE APPLICABLE TYPICAL MOUNTING HEIGHT (SEE RULE 4).

3. IF NOT SHOWN, OR IF SHOWN BUT NOT DIMENSIONED, BY THE A-SERIES PLANS OR ELEVATIONS, LOCATE AS INDICATED BY THE APPLICABLE TYPICAL ARCHITECTURAL CONFIGURATION DIAGRAM (SEE RULE 5).

4. WHEN DIMENSION SHOWN ON DRAWINGS OF OTHER DISCIPLINES IS INDICATED TO GOVERN, LOCATE AS DIMENSIONED. UTILIZE RULES 6 THRU 15 TO ESTABLISH RELATIVE LOCATIONS OF ITEMS NOT DIMENSIONED WHICH MAY OCCUR IN PROXIMITY TO THE DIMENSIONED ITEM.

5. IF NO TYPICAL ARCHITECTURAL CONFIGURATION DIAGRAM APPLIES, LOCATE AT APPROXIMATE HORIZONTAL LOCATION SHOWN AND AT APPLICABLE TYPICAL MOUNTING HEIGHT. UTILIZE RULES 6 THROUGH 15 TO ESTABLISH LOCATION AND RELATIONSHIP WITH OTHER PARTS OF THE WORK.

D. TYPICAL ARCHITECTURAL CONFIGURATION DIAGRAMS ARE ELEVATIONS WHICH ILLUSTRATE TYPICAL RULES GOVERNING THE RELATIONSHIPS BETWEEN - AND PLACEMENT OF - ITEMS WHICH OCCUR IN GROUPS OF RELATED ITEMS (SUCH AS TOILET ACCESSORIES) OR IN CLOSE PROXIMITY TO OTHER PARTS OF THE WORK (SUCH AS SWITCHES AND DOOR FRAMES). REFER TO THE "INDEX OF DRAWINGS" FOR ADDITIONAL INFORMATION REGARDING OTHER TYPICAL ARCHITECTURAL CONFIGURATION DRAWINGS PROVIDED FOR THIS PROJECT.

SMITHGROUP
architecture engineering interiors planning
SMITHGROUP, INC
35 EAST WACKER
SUITE 2200
CHICAGO, IL 60601
T 312.641.0770
F 312.641.6728
www.smithgroup.com

JJR
landscape architecture planning urban design civil engineering environmental science
JJR, LLC
35 EAST WACKER DRIVE
SUITE 2200
CHICAGO, ILLINOIS 60601
312.641.0510 T
312.641.0668 F
www.jjr-us.com

AEI Affiliated Engineers
Affiliated Engineers, Inc.
5802 Research Park Boulevard
Madison, Wisconsin 53719
Tel 608.238.2616 Fax 608.238.2614

Thornton Tomasetti
Thornton Tomasetti, Inc.
330 N. Wabash Avenue, Suite 1500
Chicago IL 60611-7622
T 312.596.2000 F 312.596.2001

TERRA ENGINEERING LTD.
225 West Ohio Street, 4th Floor
Chicago, Illinois 60654
T:(312)467-0123 F:(312) 467-0220

SEALS AND SIGNATURES

REV. NO.	DESCRIPTION	BY	APVD	DATE

Argonne NATIONAL LABORATORY

FMS
Facilities Management Services

PROJECT TITLE: ADVANCED PROTEIN CRYSTALLIZATION FACILITY, ARGONNE NATIONAL LABORATORY

PROJECT NO: 22378.000

DRAWING TITLE

TYPICAL RULES FOR DETERMINING MOUNTING HEIGHTS AND LOCATIONS

DESIGNED: Designer	A/E CADD FILE: G2.0.4	FACILITY NO(S)
DRAWN: Author	A/E DWG. NO.: G2.0.4	
CHECKED: Checker	CAD NO.:	
PROJECT MANAGER: ANL - JESSE ADAMS, DATE - 01/31/2012	DWG STATE	
	BIND ORDER	
FACILITY DOCUMENT NUMBER: J446-101-W-		REV. NO.: G2.0.4

Plot Date: 7/3/2012 5:02:44 PM