

ARCHITECTURAL CONCEPT DESIGN CHECKLIST

1 September 2011

PROJECT NAME:

DATE:

DESIGNER:

REVIEWER:

A. General Design Issues:

<u>Item #</u>	<u>Item</u>	<u>Check</u>	
		<u>Des</u>	<u>Rev</u>
1.	The design does not exceed the gross area limits established by the project 1391 Form, or other official scope definition criteria. The facility Gross Area calculations shall be as stated in Engineering Construction Bulletin (ECB) 2008-29	_____	_____
2.	The design complies with Engineering and Construction Bulletin No. 2009-20 Subject Access for People with Disabilities or deviations have been clearly noted.	_____	_____
3.	Applicable Force Protection measures as defined in UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings.	_____	_____
4.	The LEED Rating Tool has been utilized to determine the required rating for MILCON Projects or as directed by the Project manager.	_____	_____
5.	The design is in compliance with the National Fire Protection Association 101 Life Safety Code and UFC 3-600-01 Fire Protection Engineering for Facilities.	_____	_____
6.	The HQUSACE list of publications has been reviewed for applicability to this project. Listing includes Army Regulations (AR), Technical Manuals (TM), Design Guides (DG), Engineering Regulations (ER) and Engineering Technical Letters (ETL).	_____	_____
7.	For U.S. Navy Projects, http://www.wbdg.org/references/pa_dod.php has been reviewed for pertinent publications.	_____	_____
8.	Architectural Peer Review has been conducted and comments	_____	_____

	addressed.		
9.	Interior design aspects of project will be developed in accordance with UFC 3-120-10 Interior Design unless directed otherwise.	_____	_____
10.	The appropriate Corps of Engineers Center of Expertise for this project (http://www.usace.army.mil/civilworks/cecwe/coexpert/), has provided assistance in the design of this project in accordance with ER 1110-1-8158.	_____	_____
11.	For projects designed to be used primarily by foreign personnel, cultural considerations unique to the user have been identified and appropriate features incorporated into the design.	_____	_____
12.	Where present, Sensitive Compartmented Information Facilities (SCIFs) have been designed in accordance with ICD 705 TECHNICAL SPECIFICATIONS FOR CONSTRUCTION AND MANAGEMENT OF SENSITIVE COMPARTMENTED INFORMATION FACILITIES	_____	_____
13.	Installation Design Guides have been followed.		
14.	Roofing system selection was made after reviewing UFC 3-330-02A Commentary On Roofing Systems.	_____	_____
15.	If metal buildings are used, UFC 3-320-04A Metal Building Systems, with Change 2 has been reviewed	_____	_____
16.	If project is design / build, the Design / Build Instructions for Military Construction has been reviewed.	_____	_____
17.	Peer reviews are accomplished IAW memo titled "Implementation of Quality Control in Facilities Development Division" found on the EC-TF web site.	_____	_____

B. Drawings:

<u>Item #</u>	<u>Item</u>	<u>Check</u>	
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B1 *General –*

1.	The CADD Standards for the project have been adhered to in setting up all design files. Particular attention should be given to font size, level symbology detail reference symbol scale, etc.	_____	_____
2.	The information within the Title Block of each drawing has been reviewed for accuracy including the “Designed By”, “Drawn By”, “Checked By” and “File No.” fields.	_____	_____
3.	The Index Sheet has been coordinated with the current list of architectural drawings with respect to drawing number and title.	_____	_____
4.	Dimensions are based upon locally available materials to the greatest extent possible. Accordingly, nominal metric dimensions have been utilized – i.e., 100mm/150mm/200mm for wall thicknesses, etc.	_____	_____
5.	Graphic scales are included on all drawings.	_____	_____
6.	Where more than one scale is used on a drawing, the appropriate graphic scales have been included.	_____	_____

B2 *Abbreviations & Symbols –*

1.	A drawing has been included to identify abbreviations and symbols utilized on the project drawings and have been coordinated with the other architectural drawings for compliance.	_____	_____
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B3 *Floor Plans –*

1.	A Composite Floor Plan has been included for those buildings that are too large in size to fit on a single floor plan drawing at a scale of 1:100 and the overall building dimensions are indicated on this plan.	_____	_____
2.	Where a Composite Floor Plan is utilized, break lines are shown where the floor plan is broken down into partial plans and the sheet number where the partial plan can be found is noted.	_____	_____

3.	Fire rated partitions are clearly identified on the drawings and have been <u>coordinated with the Fire Protection Engineer</u> with respect to rating and location.	_____	_____
4.	Doors and windows have been clearly shown.	_____	_____
5.	North Arrow has been included on the drawing and its placement has been <u>coordinated with the Civil Engineer</u> . If Plan North is used, it is appropriately shown.	_____	_____
6.	<u>Coordination with Structural Engineer</u> has been completed with respect to column designation, grid spacing, estimated column sizes, building expansion joint locations, finished floor elevations, bearing wall locations, etc.	_____	_____
7.	Floor elevations have been <u>coordinated with the Civil Engineer</u> .	_____	_____
8.	Location and size of mechanical and electrical spaces have been <u>coordinated with the appropriate engineering discipline</u> .	_____	_____
9.	The locations of wall and building section cuts are clearly indicated on the floor plans.	_____	_____
10.	The gross floor area is indicated on each of the floor plan drawings and the gross building area is indicated on the ground floor plan.	_____	_____

B4 *Roof Plan –*

1.	Drawing clearly indicates direction and degree of roof slope. This has been <u>coordinated with the Structural Engineer</u> .	_____	_____
2.	Interior roof drains have been avoided to the greatest extent possible in favor of perimeter roof drainage. Gutters, scuppers, leaders and other roof drainage components have been clearly shown and identified on the plan.	_____	_____

B5 *Building Elevations –*

1.	Fenestration – doors, windows, etc. - has been coordinated with the floor plan drawings with respect to size, location and reference number.	_____	_____
2.	Finished floor elevations are identified and have been <u>coordinated with the Structural Engineer and Civil Engineer</u> .	_____	_____

3.	Exterior building finishes have been noted.	_____	_____
4.	Approximate finished grade has been shown and <u>coordinated with the Civil Engineer</u> .	_____	_____
5.	Floor to floor heights and other vertical dimensions (i.e., window and louver sills, exterior stair landings, etc.) have been identified.	_____	_____

B6 *Building Sections –*

1.	Building section cut locations have been noted on the floor plans.	_____	_____
2.	Vertical dimensions and finished floor elevations have been noted as have room names/numbers.	_____	_____
3.	Sufficient space has been provided above suspended ceilings and below floor/roof slab to accommodate anticipated mechanical ductwork and other utilities.	_____	_____
4.	Column grids and bubbles have been shown and coordinated with the floor plans.	_____	_____
5.	Finished floor (or top of slab) elevations have been <u>coordinated with the Structural Engineer and Civil Engineer</u> .	_____	_____

B7 *Wall Sections –*

1.	Wall section cut locations are correctly shown on the floor plans.	_____	_____
2.	Exterior wall sections have been <u>coordinated with Mechanical Engineer</u> for location of vapor barrier.	_____	_____
3.	Vertical dimensions and finished floor elevations are indicated.	_____	_____
4.	Construction materials have been indicated or noted.	_____	_____
5.	Required thermal values for wall and roof assemblies have been noted but insulation thickness has <u>NOT</u> been indicated.	_____	_____
6.	Column grid and bubble have been provided.	_____	_____

B8 *Miscellaneous Items –*

1.	Where Force Protection measures apply, the window sill height in occupied buildings is at least 1200mm above the finished floor elevation unless noted otherwise by project specific Force Protection design guidance.	_____	_____
2.	If demolition is involved, the extent of the demolition work is clearly identified on the drawings.	_____	_____
3.	Presence of equipment such as monorails, bridge cranes, vehicle lifts, etc. has been <u>coordinated with Mechanical, Electrical and Structural Engineers</u> as appropriate.	_____	_____
4.	For renovation projects, clear definition has been made on the drawings between new and existing work.	_____	_____
5.	The need for seismic design has been determined.	_____	_____

C. Specifications:

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1.	Project outline specifications have been developed in accordance with TAC Design Instructions Manual paragraph 3.3.1.	_____	_____
2.	Terminology is consistent between drawings and outline specs.	_____	_____
3.	Use of wood in exterior locations will be avoided or kept to a minimum. .	_____	_____
4.	The use of loose fill insulation will be avoided due to the inability to adequately insure that masonry cells are free of obstructions that might prohibit the flow of insulation.	_____	_____

D. Design Analysis:

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1.	Design analysis has been created utilizing the standard CETAC-EC-TF template.	_____	_____
2.	Coordination between design analysis and drawings has been done with respect to selected building systems, design thermal (u) values, required toilet fixture counts, etc.	_____	_____