



DESCRIPTION : 2.70 M (W) X 1.00 M (H)

FREDS/ILDING TYPE WINDOW

6 MM IN TEMPERED CLEAR GLASS W/8 MIL SECURITY FILM

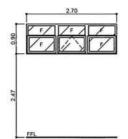
50 MM X 100 MM POWDERED COATED WHITE ALUMINIUM FRAME TUBE

HEAVY DUTT ALUMINIUM WINDOW W/FUSH HANDLE & LOCK

2.70 M (W) X 1.00 M (H) COMBI BLINDS

FRONT ELEVATION, PROPERTY SUPPLY STORAGE ROOM, ACCOUNTING STORAGE ROOM

REQ'D SET(S) : 13 (THIRTEEN)

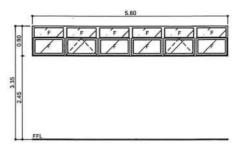




DESCRIPTION : 2.70 M [W] X 0.70 M [H]
FIXED GLASS TIPE WINDOW
-6.MM THE TEMPERED CLEAR GLASS W/8 ML SECURITY FILM
-50 MM X 100 MM POWDERED GOATED WHITE ALUMINUM FRAME TUBE
2.70 M [W] X 0.70 M [H] COMBISINGS

FRONT ELEVATION, PROPERTY SUPPLY STORAGE ROOM, ACCOUNTING STORAGE ROOM LOCATION

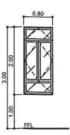
REQ'D SETISI : 21 (TWENTY-ONE)





S.80 M [M] X.070 M [H]
FRED GLASS TYPE WINDOW
- 8 MM THE EMPRED CLEAR GLASS W/8 MX SECURITY FILM
- 50 MM X 100 MM FOWDERED COATED WHITE ALUMINUM FRAME TUBE
- 50 MM X 100 MM FOWDERED SEINDS DESCRIPTION :

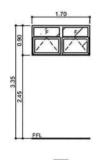
REQ'D SET(S) : 2 (TWO)





DESCRIPTION : 0.80 M (M) X 2.00 M (M)
FIXED/CASS-MENT TYPE WINDOW
- 6. MM IN EMPREED CLEAR GLASS: M/B MIL SECURITY FILM
- 50 MM X 100 MM POWDEED COATED WHITE AUMMIUM FRAME TUBE
- HEAVY DUTY AUMMINIAM WINDOW MY CAM HANDLE

: REAR & LEFT SIDE ELEVATION REQ'D SET(S) : 16 (SIXTEEN)

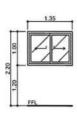




DESCRIPTION : 1.70 M [W] X 0.90 M [H]
FIRED CLASS TIPE WINDOW
-6 MM THE TEMPERED CLEAR GLASS W/ 8 MIL SECURITY /FROSIED FLM
-50 MM X 100 MM POWDERED COATED WHITE ALUMINUM FRAME TUBE
-1.70 M [M] X 0.90 M [M] COMB BEINDS

LOCATION : MAINTENANCE STAFF

REQ'D SET(S) : 2 (TWO)





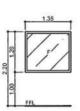
DESCRIPTION

1.35 M (W) X 1.00 M [H]
SUBNIG TYPE WINDOW

- 6 MM THE EMPERED CLEAR GLASS W/ 8 MIL SECURITY FR.M
- 50 MM X 100 MM POWDERED COALED WHITE ALUMINUM FRAME TUBE
- HEAVY DUTY ALUMINUM WHOODW W/ FLUSH HANDLE & LOCK
1.35 M (W) X 1.00 M [H] COMB BUNDS

: RIGHT SIDE ELEVATION, CHIEF OFFICE LOCATION

REQ'D SET(S) : 2 (TWO)





DESCRIPTION : 1.35 M (W) X 1.20 M (M)

FIXED GLASS THE WINDOW

- 8 MM THE TEMPERS CLEAR GLASS W/8 MIL SECURITY FILM

- 50 MM X 100 MM POWDERED COATED WHITE ALUMINUM FRAME TUBE

1.35 M (W) X 1.20 M (M) COMBINED COATED WHITE ALUMINUM FRAME TUBE

LOCATION : CHIEF OFFICE REQ'D SET(S) : 1 (ONE)



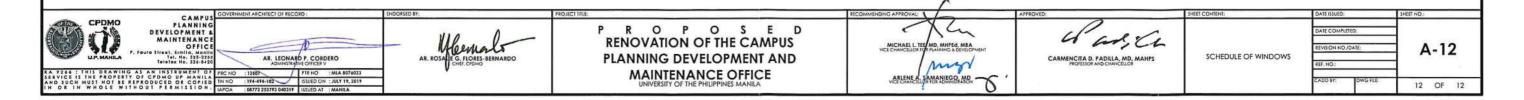
DESCRIPTION :

0.60 M (W) X 0.60 M [H]
AWNING TIPE MINDOW
4 MM. HIS EMPERED CLEAR GLASS W/ B MIL SECURITY /FROSTED FILM
- 50 MM X 100 MM FOWDITED COATED WHILE ALLIMENUM FRAME TUBE
- HEAYP DUTH LUMINHUM WINDOW W/ CAM HANDLE

RIGHT SIDE ELEVATION, PANTRY TOILETS, CHIEF OFFICE REST ROOM, ADMINISTRATIVE DEPARTMENT RESTROOM LOCATION

REQ'D SET(S) 6 (SIX)

# SCHEDULE OF WINDOWS A-12 SCALE: 1:50 MTS



# CONSTRUCTION NOTES

## GENERAL NOTES:

- A. IN THE INTERPRETATION OF THESE DRAWINGS, INDICATED DIMENSIONS SHALL GOVERN AND DISTANCES OR SIZES SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.
- B. REINFORCING BARS FOR CONCRETE EXPOSED TO WEATHER SHALL BE PROTECTED WITH AT LEAST 75MM CLEAR DISTANCE AND IN NO CASE LESS 40MM CONCRETE. THESE CONDITIONS MAY BE WAIVED WHEN ADEQUATE WATERPROOFING IS PROVIDED.
- C. REINFORCING BARS SHALL BE DEFORMED CONFORMING TO ASTM A615 BILLET STEEL AS FOLLOWS:
  16MM9 BARS AND LARGER SHALL BE HIGH GRADE WITH MINIMUM Fy = 414 MFA (80,000PSI)
  12MM9 BARS AND SMALER SHALL BE INTERMEDIATE GRADE WITH FY = 276 MFA (40,000PSI)
  IF BENDING AND WELDING ARE IMPORTANT, DEFORMED BAR SHALL CONFORM TO ASTM A706 LOW ALLOY GRADE 414 STEEL BAR.
- D. ALL CONCRETE WORKS SHALL BE DONE IN ACCORDANCE ACI-318-95 BUILDING CODE FOR REINFORCED CONCRETE AND ALL STRUCTURAL STEEL WORKS SHALL BE DONE IN ACCORDANCE WITH THE AISC SPECIFICATIONS AS IT DOES NOT CONFLICT WITH THE NATIONAL STRUCTURAL CODE OF THE PHILIPPINES (INSCI-01-11) RECUIREMENTS.
- E. SLAB ON FILL MUST NOT BE PLACED UNLESS FILL HAS BEEN PROPERLY COMPACTED. ALL SLAB ON FILL SHALL BE PROVIDED WITH 100MM THICK WELL COMPACTED CLEAN COARSE SAND BED EXCEPT IN DRIVEWAYS WHERE IT SHALL BE 150MM. BACK FILL OF ALL EXCAVATED AREAS AND THE PREPARATION OF SUB-BASE SHALL BE WELL COMPACTED AT LEAST 95%, OF THE STANDARD PROCTOR DENSITY BEFORE WELL COMPACTED CLEAN COARSE SAND ARE LAID.
- F. THE CONTRACTOR SHALL COORDINATE WITH THE AR, ME, SE, AND EE PLAN AS TO THE EXACT SIZES AND LOCATION OF THE HOLES THRU FLOOR SLABS AND WALLS.
- G. CONTRACTOR TO PROVIDE SHOP DRAWINGS + BAR CUTTING LIST FOR APPROVAL OF THE STRUCTURAL ENGINEER.

## NOTES ON CONCRETE MIXES & PLACING:

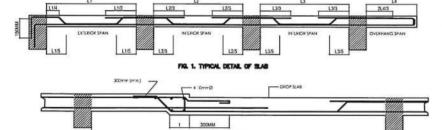
- A. UNLESS OTHERWISE INDICATED IN PLANS OR NOTED IN THE STRUCTURAL SPECIFICATIONS, THE MINIMUM 28 DAYS COMPRESSIVE CYLINDER STRENGTH OF CONCRETE SHALL BE AS EAST TIME.

- SS OTHERWISE INDICATED IN PLANS OR NOTED IN THE STRUCTURAL SPECIFICATIONS, THE MINIMUM 28 (ORTHOR OF CHAPTER)

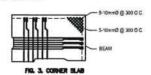
  1. FOR SUSPENDED SLABS, BEAMS, AND GIRDERS
  2. FOR COLUMNS AND PEDESTIAL
  2. FOR COLUMNS AND PEDESTIAL
  3. FOR RETAINING WALLS
  4. FOR FOOTING TIE BEAMS
  5. FOR PARAPET WALLS, GUTTERS AND OTHER STRUCTURAL ELEMENTS
  6. FOR SLAB ON GRADE, CURTAIN WALLS, BEDDED SLAB, SIDEWALKS
  7. FOR NON STRUCTURAL ELEMENTS
  17 MPA (2,500 PSI)
  17 MPA (2,500 PSI) B. CONCRETE SHALL BE DEPOSITED IN ITS FINAL POSITION WITHOUT SEGREGATION, REHANDLING OR FLOWING. PLACING SHALL BE DONE PROPERLY WITH BUGGIES, BUCKETS OR WHEEL-BORROWS. NO CHUTES SHALL EXCEED SIX (6) METERS AGGREGATE LENGTH.
- C. NO DEPOSITING OF CONCRETE SHALL BE ALLOWED WITHOUT THE USE OF VIBRATORS UNLESS AUTHORIZED BY THE DESIGNER IN WRITING

#### NOTES ON CONCRETE SLABS:

- A. ALL REINFORCEMENTS SHALL BE PROVIDED WITH 20MM CLEAR CONCRETE COVER EXCEPT FOR SLAB ON GRADE WHERE REINFORCEMENT SHOULD BE PLACED AT THE CENTER OF THE SLAB THICKNESS.
- B. UNLESS OTHERWISE DETAILED IN CONTINUOUS SLABS HAVING SAME REINFORCEMENTS RUNNING IN ONE DIRECTION, REINFORCING BARS SHALL BE BENT UP OR EXTENDED AS SHOWN IN FIGURE 1.
- C. FOR TWO-WAY SLASS, BARS ALONG THE SHORTER SPAN SHALL BE PLACED BELOW THE LONGER SPAN BARS AT CENTER AND ABOVE THE LONGER SPAN BARS AT THE SUPPORTS, THE SPACING OF BARS AT THE COLUMN STRIP SHALL BE 1.5 TIMES THE SPACING IN THE MIDDLE STRIP, BUT IN ANY CASE GEREAT PANA 2.5 THE SLAB THICKNESS OF A SHOW.
- O. TEMPERATURE BARS OF SUSPENDED SLABS SHALL BE PLACED ABOVE THE MAIN REINFORCEMENT AT MIDSPAN AND SHALL BE BELOW THE MAIN REINFORCEMENT AT THE SUPPORTS.
- E. UNLESS OTHERWISE NOTED, ALL BENDS SHALL BE REINFORCED WITH 10MM/Ø AT 0.25 MOC EW AT CENTER OF SLAB. SLAB CONSTRUCTION JOINTS SHALL NOT BE MORE THAN 3.0M.
- F. WHENEVER REQUIRED, DROP SLAB SHALL BE ADDITIONALLY REINFORCED AS SHOWN IN FIGURE 2.
- G. EXTRA REINFORCEMENTS SHALL BE PROVIDED AT CORNER SLAB AS SHOWN IN FIGURE 3.
- H. UNLESS NOTED IN THE PLAN, ALL OPENNINGS. SHALL BE REINFORCED ALL AROUND BY 2-16MMØ BAR AT THE TOP AND BOTTOM OF THE SLAR.



THICKNESS	MINIMUM TEMPERATURE BARS				
100mm	10mmØ @ 400mm O C				
125mm	10mmØ @ 300mm O.C.				
150mm	10mmØ @ 250mm O C				



## NOTES ON REINFORCED CONCRETE BEAMS & GIRDERS

- A. UNILESS OTHERWISE NOTED IN THE SPECIFICATIONS, CAMBER ALL BEAMS AND GIRDERS AT LEAST 6MM FOR EVERY 4.5M OF SPAN EXCEPT CANTILIVEES FOR WHICH CAMBERS SHALL BE NOTED IN THE PLANS OR AS ORDERED BY THE DESIGNER BUT IN CASE LESS THAN ZOMM FOR EVERT 3M OF SPAN.
- C. IF BEAM REINFORCEMENT ENDS IN A WALL, THE CLEAR DISTANCE FROM THE BAR TO THE FARTHEST FACE OF THE WALL SHALL NOT BE LESS THAN SOMM. MINIMUM EMBEDMENT LENGTH SHALL BE AS SHOWN IN TABLE 2.

- F. NO SPLICE SHALL BE PERMITTED ON BEAMS WHERE CRITICAL BENDING OCCURS. LENGTH OF LAP SPLICE WHERE PERMITTED SHALL BE AS SHOWN IN TABLE 2. WELD SPLICES SHALL BE DEVELOP IN THIS HOSSION AT LEAST 1225. OF THE SPECIFIED YELD STRENGTH OF BAR. NOT MORE THAN 50% OF THE BARS AT ANY DOC SECTION SHALL BE ALLOWED TO SPLICE THESEN, A TYPICAL WELDED 5 SPLICE DETAILS HOWN IN FIGURE 7.
- G. FOR ALL BEAMS, ALWAYS FIT THE RENFORCEMENTS IN ONE LAYER WHENEVER POSSIBLE, WHENEVER BEAM IS SUPPORTING A PLANTED COLUMN, BOTTOM BAR AT MIDSPAN OF THE BEAM SHALL CONTINUE UP TO THE SUPPORTS.
- H. FOR GIRDERS, HOOPS SHALL BE USED WITHIN THE DISTANCE TWICE OF THE GIRDER DEPTH, BEYOND IT, STIRRUPS WITH SEISMIC HOOKS MAY BE USED, WITHIN THE SPLICED LENGTH, IDMMØ HOOPS SHALL BE PROVIDED AT 0.10MOC.
- I. INDIVIDUAL BARS WITHIN A BUNDLE SHALL TERMINATE AT DIFFERENT POINTS WITH AT LEAST 4D TIMES THE BAR DIAMETER STAGGER.

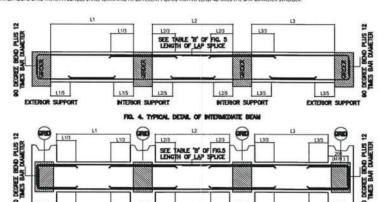
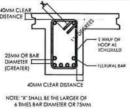


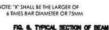
FIG. 5. TYPICAL DETAIL OF GROER

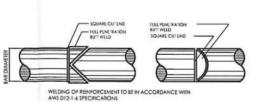
INTERIOR COLUMN

	BAR IN TENSION												BAR IN COMPRESSION						
BAR		FC	R Fy	275 H	PA			FO	R Fy	414 M	PA		FOR F	y = 27	S MPA	FOR F	y = 27	S MPA	
ASTM AS15	fo -	21 MPA	fo -	26 MPA	fo -	35 MPA	fo =	21 MPA	fo -	28 MPA	fo -	35 MPA	fo -	fo =	fo -	fo -	fo =	fo -	
~010	CASE	CASE 2	CASE	CASE 2	CASE	CASE 2	CASE 1	CASE 2	OE I	CASE 2	CASE	CASE 2	21 MPA	28 MPA	36 MPA	21 MPA	28 MPA	36 MP	
10mm0	300	450	250	375	250	350	450	650	400	575	350	500	200	200	200	250	200	200	
12mm0	350	550	300	450	300	400	550	800	475	700	425	625	200	200	200	300	250	250	
16mm0	475	750	425	600	375	550	750	1050	650	925	575	825	250	250	250	350	350	300	
29mm0	600	900	525	750	475	700	900	1300	800	1150	700	1025	300	300	250	450	400	350	
25mm0	900	1375	800	1200	700	1050	1375	2050	1200	1800	1050	1600	400	350	300	550	500	450	
28mm <b>0</b>	1025	1550	900	1325	800	1200	1550	2300	1325	2000	1200	1800	450	400	350	650	550	500	
32mm0	1175	1750	1000	1525	900	1350	1750	2625	1525	2275	1350	2050	500	450	400	750	650	550	
NOTES:	1.C 2.0	CASE		ARS WITH		ON WITH S													



EXTERIOR COLUM





EXTERIOR COLUMN

FIG. 7. TYPICAL WELD SPLICE DETAIL

# NOTES ON REINFORCED CONCRETE COLUMN:

- A. BEAM-COLUMN JOINTS SHALL BE PROVIDED BY A HOOP AT D. TMOC. THE NUMBER OF SETS FOR SUCH HOOPS SHALL BE THE SAME IN THE CONFINED REGION AS SCHEDULED.
- B. WHERE COLUMN CHANGES IN SIZE, VERTICAL REINFORCEMENT SHALL BE OFFSET AT A SLOPE OF NOT MORE THAN 1:6 AND EXTRA TOMM® HOOPS AT 0.10MOC SHALL BE PROVIDED THROUGHOUTH THE OFFSET REGION.
- C. SPLICE SHALL BE ALLOWED ONLY WITHIN THE CENTER HALF OF THE CLEAR COLUMN HEIGHT. SPLICE LENGTH SHALL BE PROVIDED WITH A HOOF SPACED AT D. IDMOC. SPLICE LENGTH SHALL BE CONSIDERED AS TENSION SPLICE AS PRESENTED IN TABLE 2.
- E. CONFINED REGION SHALL BE EQUAL TO THE LARGER OF THE FOLLOWING

# -1:6 MAX

#### NOTES ON STRUCTURAL STEEL:

- A. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST EDITION OF AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL UNILESS OTHERWISE SHOWN OR NOTED.
- B. ALL STRUCTURAL STEEL INCLUDING THAT OF GUSSET PLATES SHALL SE ASTM A36 STEEL WITH YIELD STRENGTH OF FY = 248 MPA.
- C. ALL BOLTS AND THREADED FASTENERS SHALL BE ASTM A325.
- D. ALL WELDS SHALL BE E70XX ELECTRODE AND SHALL DEVELOP AT LEAST 100% OF THE STRENGTH OF THE CONNECTED MEMBERS.
- E. THE CONTRACTOR SHALL SUBMIT TO THE STRUCTURAL ENGINEER THE SHOP/FABRICATION DRAWINGS FOR APPROVAL BEFORE ANY WORKS.
- F. ALL DOUBLE ANGLE STRUCTURAL MEMBERS MUST BE PROVIDED WITH FILLER PLATES AT 0.30MOC MAXIMUM SPACING.
- G. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL HAVE AT LEAST TWO COATS OF RED LEAD OR ZINC CHROMATE PRIMER PAINT.
- H. ALL TRUSSES, BEAMS, AND GIRDERS, MUST BE PROVIDED WITH A CAMBER AT THE RATE OF SMM FOR EVERY 3,0M OF CLEAR SPAN IN A PARABOLIC LAYOUT.

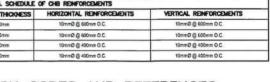
# NOTES ON FOUNDATIONS:

- A. ALL FOOTINGS WERE DESIGNED BASED ON THE ALLOWABLE SOIL BEARING CAPACITY OF 150 KPA. THE CONTRACTOR SHALL REPORT IN WRITING TO THE DESIGNER THE ACTUAL SOIL CONDITION AT THE LEVEL OF THE FOOTING AND CONFIRM THE ACTUAL SOIL BEARING CAPACITY BEFORE DEPORTMENT OF CONFIRMS.
- B. NO FOOTING SHALL REST ON UNCOMPACTED FILL NOR LOOSE SOL. ALL FOOTINGS SHOULD REST AT LEAST 1.0 BELOW THE GROUND. THE MINIMUM CONCRETE PROTECTION FOR REINFORCEMENTS SHALL BE 75MM CLEAR.

# NOTES ON CHB WALLS:

- A. ALL CHB WALLS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 450 PSI AND SHALL BE REINFORCED AS PRESENTED IN TABLE 3.
- B MIMUM LAP LENGTH OF SPLICE SHALL BE 250MM.
- D. PROVIDE BEAMS BLOCKS AT EVERY 10th LAYER OF CHB AND A POST AT EVERY 3.0M. SEE FIGURE 9 AND FIGURE 10.
- E. WHERE CHB WALLS ADJOIN COLUMNS, RC BEAMS, AND RC WALLS, DOWELS WITH THE SAME SIZE AS THE VERTICAL OR HORIZONTAL REINFORCEMENTS SHALL BE PROVIDED.

BLOCK THICKNESS	HORIZONTAL REINFORCEMENTS	VERTICAL REINFORCEMENTS			
100mm	10mmØ @ 600mm O C.	10mmØ @ 600mm O C			
125mm	10mmD @ 600mm O.C.	10mmB @ 600mm O.C.			
150mm	10mmØ @ 400mm O.C.	10mmØ @ 400mm O.C.			
200mm	10mmØ @ 400mm O.C.	10mmØ @ 400mm O.C.			



# DESIGN CODES AND REFERENCES:

- A. NATIONAL STRUCTURAL CODE OF THE PHILIPPINES (NSCP C101-01 AND NSCP C102-97)
- B. BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 318-05
- C. DESIGN OF CONCRETE BUILDINGS FOR EARTHQUAKE AND WIND FORCES 2ND EDITION, S. K. GOSH, A. W. DOMEL, D. A. FANELLA.
- D. AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL
- F. DESIGN OF REINFORCED CONCRETE, FIFTH EDITION BY MC CORMAC
- E. PCI DESIGN HANDBOOK, PRECAST AND PRESTRESS CONCRETE, FOURTH EDITION

