BUILD CHANGE
DENVER, CO

# CONSTRUCTION DRAWINGS
# [Plans de Construction]

## 2 AND 3 STORY MIXED USE BUILDINGS
## [ Bâtiments Avec Un Ou Deux Étages ]

HAITI POST EARTHQUAKE HOUSING RECONSTRUCTION
TECHNICAL ASSISTANCE PROGRAM

[Program d'Assistance Technique à
la Reconstuction de Logements suite an Séisme à Haiti]

# MATERIALS SPECIFICATIONS

I. CAST-IN-PLACE CONCRETE:

1. CEMENT - ASTM C150 TYPE I OR II PORTLAND CEMENT.
2. COARSE AGGREGATE - CRUSHED LIMESTONE, GRANITE, OR GRAVEL, NO MORE THAN 2.5CM IN SIZE.
3. FINE AGGREGATE - CLEAN RIVER SAND. WHITE QUARRY SAND AND BEACH SAND ARE NOT PERMITTED.
4. WATER: CLEAN, POTABLE, AND FREE FROM DELETERIOUS MATERIAL.
5. MIX RATIOS:
   a. 1 CEMENT: 3 COARSE AGGREGATE: 3 FINE AGGREGATE FOR FOOTINGS, COLUMNS, BEAMS, AND ELEVATED SLABS.
   b. 1 CEMENT: 3 COARSE AGGREGATE: 6 FINE AGGREGATE FOR SLABS ON GRADE.
6. MINIMUM COMPRESSIVE STRENGTHS:
   a. 21 MPA (3,000 PSI) FOR FOOTINGS, COLUMNS, BEAMS, AND ELEVATED SLABS.
   b. 15 MPa (2,200 PSI) FOR SLABS ON GRADE.
7. EXECUTION:
   a. AGGREGATES SHOULD BE THOROUGHLY WASHED AND CLEANED.
   b. FORMS AND EXISTING CONCRETE AND MASONRY SURFACES SHOULD BE WETTED IMMEDIATELY BEFORE CASTING CONCRETE.
   c. CONCRETE SHOULD BE MIXED FOR AT LEAST 10 MINUTES AFTER INGREDIENTS HAVE BEEN ADDED AND SHOULD BE PLACED NO MORE THAN 90 MINUTES AFTER THE WATER AND CEMENT HAVE BEEN COMBINED.
   d. DO NOT PERMIT CONCRETE TO BECOME DRY DURING CURING. CONCRETE IN FORMS SHOULD BE KEPT WET UNTIL THE FORMS ARE REMOVED.

II. REINFORCING STEEL:

1. YIELD STRENGTHS:
   - 276 MPA (40 KSI) FOR #5 BARS AND SMALLER.
   - 414 MPA (60 KSI) FOR #6 BARS AND LARGER.
2. ALL BARS SHALL BE RIBBED. SMOOTH BARS ARE NOT ALLOWED.
3. BAR ENDS SHOULD BE HOOKED AS SHOWN ON THE DRAWINGS.
4. REINFORCING SHOULD BE CLEANED AND FREE FROM RUST PRIOR TO CONCRETE PLACEMENT.
5. STAGGER SPLICES OF ADJACENT BARS, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
6. LAP SPLICES AND DOWEL LENGTHS SHALL BE AS INDICATED ON THE DRAWINGS.
7. HOOKS FOR STIRRUPS SHALL BE 135 OR 180 DEGREES. 90 DEGREE HOOKS WILL NOT BE PERMITTED.
8. STAGGER HOOKS OF ADJACENT STIRRUPS.
9. BARS SHOULD BE SUPPORTED BY ALL-PLASTIC SUPPORTS OR PRECAST CONCRETE BLOCKS ("DOBBIES") WITH EMBEDDED WIRE. BARS SHOULD NOT BE UNSUPPORTED FOR LENGTHS EXCEEDING 1 METER.
10. BARS SHOULD BE COLD BENT.

III. CONCRETE MASONRY INFILL:

1. BLOCKS:
   a. CEMENT - ASTM C150 TYPE I OR II PORTLAND CEMENT.
   b. COARSE AGGREGATE - CRUSHED LIMESTONE, GRANITE, OR GRAVEL, NO MORE THAN 2.5CM IN SIZE.
   c. FINE AGGREGATE - CLEAN RIVER SAND. WHITE QUARRY SAND AND BEACH SAND ARE NOT PERMITTED.
   d. WATER: CLEAN, POTABLE, AND FREE FROM DELETERIOUS MATERIAL.
   e. BLOCK SIZE: 40 CM IN LENGTH, 20 CM IN HEIGHT, WIDTH AS SPECIFIED ON THE DRAWINGS.
2. MORTAR:
   a. CEMENT - ASTM C150 TYPE I OR II PORTLAND CEMENT.
   b. FINE AGGREGATE - CLEAN RIVER SAND. WHITE QUARRY SAND AND BEACH SAND ARE NOT PERMITTED.
   c. WATER: CLEAN, POTABLE, AND FREE FROM DELETERIOUS MATERIAL.
   d. HYDRATED LIME - TYPE S
3. GROUT:
   a. CEMENT - ASTM C150 TYPE I OR II PORTLAND CEMENT.
   b. COARSE AGGREGATE - PEA GRAVEL NOT EXCEEDING 6 MM (1/4") IN DIMENSION.
   c. FINE AGGREGATE - CLEAN RIVER SAND. WHITE QUARRY SAND AND BEACH SAND ARE NOT PERMITTED.
   d. WATER: CLEAN, POTABLE, AND FREE FROM DELETERIOUS MATERIAL.
4. MIX RATIOS:
   a. CONCRETE BLOCKS: 1 CEMENT: 3 COARSE AGGREGATE: 3 FINE AGGREGATE.
   b. MORTAR: 1 CEMENT: 3 FINE AGGREGATE: ½ HYDRATED LIME.
   c. GROUT: 1 CEMENT: 2 COARSE AGGREGATE: 2 FINE AGGREGATE.
5. MINIMUM COMPRESSIVE STRENGTHS:
   a. CONCRETE BLOCKS: 4.0 MPA (700 PSI).
   b. MORTAR: 17 MPA (2,500 PSI).
   c. GROUT: 13.8 MPA (2,000 PSI).
6. EXECUTION:
   a. ROUGHEN CONCRETE BED TO RECEIVE MASONRY AND SATURATE WITH WATER BEFORE BLOCKS ARE PLACED.
   b. LET BLOCKS CURE FOR 7 DAYS PRIOR TO PLACEMENT. BLOCKS SHOULD NOT BE CURED IN THE SUN. COVER BLOCKS WITH A TARP AND WET THEM WITH CLEAN WATER DURING CURING.
   c. MIX MORTAR FOR AT LEAST 5 MINUTES. ADD ONLY ENOUGH WATER FOR WORKABILITY.
   d. GROUT SHOULD BE PLACED NO LATER THAN 60 MINUTES AFTER WATER HAS BEEN ADDED TO THE BATCH.
   e. WALL REINFORCING SHOULD BE PLACED IN THE CENTER OF THE BLOCKS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
   f. THICKNESS OF HORIZONTAL BED JOINTS AND VERTICAL JOINTS SHOULD NOT EXCEED 15 MM.
   g. DO NOT REUSE OLD CONCRETE BLOCKS.
   h. USE RUNNING BOND.
   i. CONCRETE BLOCK WALLS SHALL BE LAID UP FULL HEIGHT FOR A DAY'S GROUT POUR IN LIFTS NOT EXCEEDING 1 METER HIGH. MAXIMUM HEIGHT OF GROUT POUR SHALL NOT EXCEED 3 METERS.
   j. ENSURE GROUT FLOWS INTO VOIDS AND COMPLETELY SURROUNDS REINFORCING STEEL. USE A ROD TO COMPACT THE GROUT BETWEEN THE BLOCK CAVITIES.
   k. PROVIDE CLEANOUTS BY LEAVING OUT EVERY OTHER FACE SHELL UNIT IN BOTTOM COURSE; SEAL WITH MORTAR AFTER INSPECTION AND BEFORE GROUTING.
   l. DO NOT POUR GROUT BEFORE MASONRY WALL AND PILASTERS HAVE SET A MINIMUM OF 36 HOURS IN HOT WEATHER OR 60 HOURS IN COLD WEATHER.
   m. COMPLETE GROUTING IN ONE OPERATION, IN ONE DAY, WITHOUT CONSTRUCTION JOINTS.
   n. KEEP EACH SIDE OF BLOCK WALLS AND TOP OF GROUT POUR DAMP FOR A PERIOD OF 3 DAYS (MINIMUM) AFTER GROUTING IS COMPLETED TO PREVENT TOO RAPID DRYING DURING HOT WEATHER AND DRYING WINDS.

IV. WOOD:

1. MATERIALS
   a. STRUCTURAL LUMBER - STANDARD DRESSED VISUALLY GRADED SOUTHERN PINE NO. 2 SAWN LUMBER.
   b. STRUCTURAL SHEATHING - APA GRADE MARKED FOR CONFORMANCE WITH PRODUCT STANDARD PS 1-95, EXPOSURE 1, APA RATED SHEATHING, THICKNESS AS SHOWN ON THE DRAWINGS. ALL PLYWOOD ½" (13MM) OR THICKER SHALL BE 5-PLY.
   c. NAILS - STEEL COMMON WIRE NAILS. BOX NAILS ARE NOT PERMITTED. NAILS AT LOCATIONS EXPOSED TO WEATHER SHOULD BE GALVANIZED.
   d. WOOD SCREWS - GALVANIZED WHERE EXPOSED TO WEATHER.
   e. BOLTS - GRADE A MACHINE BOLTS, CONFORMING TO ASTM A 307.
   f. WASHERS - UNLESS OTHERWISE NOTED, WASHERS FOR BEARING AGAINST WOOD SHALL BE PROVIDED UNDER ALL BOLT HEADS AND NUTS.
   g. PRESERVATIVE TREATMENTS - PLYWOOD AND DIMENSIONAL LUMBER SHOULD BE NATURALLY TREATED AND PAINTED.
2. EXECUTION:
   a. VERIFY SPECIES AND GRADE OF TIMBER AND PLYWOOD BY CHECKING MARKINGS ON PIECES.
   b. DO NOT USE LUMBER OR PLYWOOD WITH LARGE OR FREQUENT KNOTS, HOLES, SPLITS OR CHECKS.
   c. PAINT ALL WOOD FOR WEATHER PROTECTION.
   d. PLACE ALL JOISTS AND BEAMS WITH CROWN UP.
   e. BOLTS IN WOOD SHALL BE MACHINE BOLTS UNLESS OTHERWISE NOTED. BOLT HOLES IN WOOD SHALL BE NO MORE THAN 1 MM OVERSIZE. HOLES IN STEEL SHALL BE NO MORE THAN 2 MM OVERSIZE.
   f. WOOD SCREWS SHALL BE SCREWED (NOT DRIVEN) INTO PLACE. DRILL HOLES SAME DIAMETER AND DEPTH AS SHANK, THEN DRILL HOLES SAME DIAMETER AS AT BASE OF THREAD FOR THE THREADED PORTION.

# DESIGN REFERENCES

THE DESIGN REFERENCES THE FOLLOWING STANDARDS AND GUIDELINES:

1. AMERICAN SOCIETY OF CIVIL ENGINEER'S MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, SEI/ASCE 7-05, 2005
2. AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI318-05), 2005
3. AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI530-05), 2005
4. AMERICAN FOREST AND PAPER ASSOCIATION NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH 2005 SUPPLEMENT (NDS-05), 2005

# SEISMIC CRITERIA

THE DOCUMENTS CONTAIN DESIGN INFORMATION FOR 2 LEVELS OF SEISMIC ACCELERATION:

1. ZONE B - $S_{DS}$ = 1.05g
2. ZONE C - $S_{DS}$ = 1.67G

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.



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[Notes Générales]

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| NOT TO SCALE | 02/03/2011 |

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# SPÉCIFICATIONS DES MATÉRIAUX

I. BÉTON COULÉ SUR PLACE:

1. CIMENT - ASTM C150 CIMENT PORTLAND DE TYPE I OU II.
2. AGREGAT GROSSIER - CALCAIRE BROYE, GRANIT OU GRAVIER, MAXIMUM DE 250 MM EN DIAMETRE.
3. AGREGAT FIN - N'UTILISEZ QUE DU SABLE DE RIVIERE PROPRE. NE JAMAIS UTILISEZ DE SABLE BLANC DE CARRIERE OU DU SABLE DE PLAGE.
4. DE L'EAU - PROPRE, POTABLE, ET SANS MATERIAUX DELETERES
5. UTILISER UN DOSAGE:
   a. 1 CIMENT: 3 AGREGAT GROSSIER: 3 AGREGAT FIN POUR LES FONDATIONS, POTEAUX, POUTRES ET DALLES ELEVEES.
   b. 1 CIMENT: 3 AGREGAT GROSSIER: 6 AGREGAT FIN POUR LES DALLES AU SOL.
6. RESISTANCE A LA COMPRESSION MINIMUM:
   a. 21 MPA (3000 PSI) POUR LES FONDATIONS, POTEAUX, POUTRES ET DALLES ELEVEES.
   b. 15 MPA (2200 PSI) POUR LES DALLES AU SOL.
7. L'EXECUTION:
   a. LES AGGREGATS DOIVENT ETRE LAVES ET NETTOYES.
   b. COFFRAGE ET BETON EXISTANTS ET SURFACES DE MACONNERIE DOIVENT ETRE MOUILLEES IMMEDIATEMENT AVANT LE BETON EST MIS EN PLACE.
   c. LE BETON DOIT ETRE MELANGE AU MOINS 10 MINUTES APRES LES INGREDIENTS SONT AJOUTES ET DOIT ETRE MIS EN PLACE PAS PLUS DE 90 MINUTES APRES L'EAU ET LE CIMENT SONT AJOUTES.
   d. NE PERMETTEZ PAS LE BETON A DEVENIR SEC PENDANT LE DURCISSEMENT. LE BETON AVEC COFFRAGE DOIT ETRE MOUILLE JUSQU'A CE QUE LE COFFRAGE EST SUPPRIME.

II. ARMATURES EN ACIER:

1. LIMITE D'ELASTICITE:
   - 276 MPA (40 KSI) POUR LES ARMATURES DE DIAMETRE INFERIEUR A #5.
   - 414 MPA (60 KSI) POUR LES ARMATURES DE DIAMETRE #6 OU PLUS.
2. N'UTILISER QUE LES ARMATURES STRIEES.
3. TOUTES LES ARMATURES DOIVENT AVOIR UN CROCHET A CHAQUE FIN.
4. TOUTES LES ARMATURES DOIVENT ETRE NETTOYEES ET SANS ROUILLE AVANT LE PLACEMENT.
5. LES EPISSURES D'ARMATURES A VOISIN DOIVENT ETRE ECHELONNEES .
6. LES LONGUEURS DES EPISSURES ET GOUJONS DOIVENT ETRE COMME INDIQUE DANS LES PLANS DE CONSTRUCTION
7. LES CROCHETS POUR LES ATTACHES DOIVENT ETRE 135 OU 180, NE PERMETTEZ PAS LES CROCHETS DE 90 DEGRES.
8. LES CROCHETS DES ATTACHES DOIVENT ETRE ECHELONNEES.
9. UTILISER SOUTIEN EN PLASTIQUE POUR LES ARMATURES OU BLOCS DE BETON. LES ARMATURES NE DOIVENT PAS SANS SOUTIEN AU MOINS D'UN METRE.
10. PLIER LES ARMATURES EN FROID.

III. MURS DE BLOCS DE BÉTON:

1. BLOCS:
   a. CIMENT - ASTM C150 CIMENT PORTLAND DE TYPE I OU II.
   b. AGREGAT GROSSIER - CALCAIRE BROYE, GRANIT OU GRAVIER, MAXIMUM DE 250 MM EN DIAMETRE.
   c. AGREGAT FIN - N'UTILISEZ QUE DU SABLE DE RIVIERE PROPRE, NE JAMAIS UTILISEZ DE SABLE BLANC DE CARRIERE OU DU SABLE DE PLAGE.
   d. DE L'EAU - PROPRE, POTABLE, ET SANS MATERIAUX DELETERES.
   e. LES BLOCS: LONGUEUR DE 400 MM, HAUTEUR DE 200 MM, LARGEUR COMME INDIQUE DANS LES PLANS DE CONSTRUCTION.
2. MORTIER:
   a. CIMENT - ASTM C150 CIMENT PORTLAND DE TYPE I OU II.
   b. AGREGAT FIN - N'UTILISEZ QUE DU SABLE DE RIVIERE PROPRE. NE JAMAIS UTILISEZ DE SABLE BLANC DE CARRIERE OU DU SABLE DE PLAGE.
   c. DE L'EAU - PROPRE, POTABLE, ET SANS MATERIAUX DELETERES
   d. LA CHAUX HYDRATEE DE TYPE S
3. COULIS DE CIMENT:
   a. CIMENT - ASTM C150 CIMENT PORTLAND DE TYPE I OU II.
   b. AGGREGAT GROSSIER: GRAVIER, MAXIMUM DE 6 MM EN DIAMETRE.
   c. AGREGAT FIN - N'UTILISEZ QUE DU SABLE DE RIVIERE PROPRE. NE JAMAIS UTILISEZ DE SABLE BLANC DE CARRIERE OU DU SABLE DE PLAGE.
   d. DE L'EAU - PROPRE, POTABLE, ET SANS MATERIAUX DELETERES.
4. UTILISER UN DOSAGE:
   a. BLOCS DE BETON: 1 CIMENT: 2 AGREGAT GROSSIER: 3 AGREGAT FIN.
   b. MORTIER: 1 CIMENT: 3 AGREGAT FIN: 1/2 LA CHAUX HYDRATEE.
   c. COULIS DE CIMENT: 1 CIMENT: 2 AGREGAT GROSSIER: 2 AGREGAT FIN.
5. RESISTANCE A LA COMPRESSION MINIMUM:
   a. BLOCS DE BETON: 4 MPA (700 PSI).
   b. MORTIER: 17 MPA (2500 PSI).
   c. COULIS DE CIMENT: 13.8 MPA (2000 PSI).
6. L'EXECUTION::
   a. RENDRE LE BETON RUGUEUX ET SATURE AVANT DE METTRE EN PLACE LES BLOCS.
   b. LES BLOCS DOIVENT GUERIR 7 JOURS AVANT LE PLACEMENT. COUVREZ LES BLOCS AVEC UNE BACHE ET LES MOUILLIR AVEC DE L'EAU PROPRE PENDANT LA CURE.
   c. MELANGER LE MORTIER AU MOINS 5 MINUTES. AJOUTEZ DE L'EAU POUR OUVRABILITE.
   d. METTRE EN PLACE LE COULIS PAS PLUS TARD QUE 60 MINUTES APRES DE L'EAU A ETE AJOUTE.
   e. LES ARMATURES A MUR DOIVENT ETRE MISES EN PLACE AU CENTRE DE BLOCS.
   f. L'EPAISSEUR MAXIMUM DE JOINTS VERTICALES ET HORIZONTALES EST 15 MM.
   g. NE PAS REUTILISER LES BLOCS ANCIENS.
   h. LES BLOCS DOIVENT ETRE MIS EN PLACE COMME UNE PANNERESSE.
   i. LA HAUTEUR MAXIMUM D'UN PLACEMENT DE COULIS DE CIMENT EST 3000 MM.
   j. LE COULIS DOIT COULER DANS LES VIDES ET ENCERCLER LES ARMATURES. UTILISER UNE TIGE A FIN DE COMPRIMER LE COULIS.
   k. PREVOIR PETITS TROUS DANS TOUS LES AUTRES FACES DE BLOC, AU CORS DE MACONNERIE EN BAS. ENFERMER AVEC MORTIER APRES LE CONTROLE ET AVANT LE PLACEMENT DE COULIS.
   l. NE PAS VERSER LE COULIS AVANT QUE LES BLOCS ONT ETE PLACER UN MINIMUM DE 36 HEURES QUAND IL FAIT CHAUD OU DE 60 HEURES QUAND IL FAIT FROID.
   m. TERMINER LE PLACEMENT DE COULIS DANS UN JOUR ET SANS JOINT DE CONSTRUCTION.
   n. CHAQUE COTE ET LE HAUT DES MURS DE MACONNERIE DOIVENT CONTINUER D'ETRE MOUILLES AU MOINS 3 JOURS APRES LE PLACEMENT DE COULIS.

IV. BOIS :

1. MATERIAUX:
   a. BOIS DE CONSTRUCTION DE DIMENSIONS COURANTES SONT DE TYPE "VISUALLY GRADED SOUTHERN PINE NO. 2"
   b. LES PANNEAUX DE CONTREPLAQUE SONT DES REVETEMENTS CLASSES EN CATEGORIE D'EXPOSITION 1 SELON APA, L'EPAISSEUR COMME INDIQUE DANS LES PLANS. CONTREPLAQUE 13 MM OU PLUS GRAND DOIT AVOIR 5 PLIS.
   c. CLOUS – UTILISER LES CLOUS GALVANISES QUAND EXPOSE AU TEMPS
   d. VISSES A BOIS – GALVANISES QUAND EXPOSE AU TEMPS
   e. BOULON – GRADE A, CONFORME A ASTM A307
   f. RONDELLES – UTILISER TOUJOURS AVEC LES BOULONS
   g. UTILISER DES TRAITEMENTS NATURELLES POUR TOUT LE BOIS DE CONSTRUCTION

2. L'EXECUTION:
   a. VERIFIER QUE TOUT LE BOIS DE CONSTRUCTION SATISFAIT LES SPECIFICATIONS
   b. NE PAS UTILISER LE BOIS DE CONSTRUCTION AVEC BEAUCOUP DE TROUS, NOEUDS OU SCISSIONS
   c. PEINDRE TOUT LE BOIS DE CONSTRUCTION
   d. METTRE EN PLACE LES POUTRES DE BOIS AFIN QUE L'ARC EST EN HAUT
   e. NE PAS FABRIQUER LES TROUS DANS LE BOIS PLUS GRAND QUE 1 MM EN DIAMETRE QUE LES GOUJONS. EN ACIER, 2 MM MAXIMUM
   f. VISSER LES VISSES A MAIN

# RÉFÉRENCES DE DIMENSIONNEMENT

LE DIMENSIONNEMENT FAIT RÉFÉRECE AUX NORMES ET LIGNES DIRECTRICES SUIVANTES:

1. AMERICAN SOCIETY OF CIVIL ENGINEER'S MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, SEI/ASCE 7-05, 2005
2. AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI318-05), 2005
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4. AMERICAN FOREST AND PAPER ASSOCIATION NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH 2005 SUPPLEMENT (NDS-05), 2005

# CRITÈRES SISMIQUES

CE DOCUMENT A INFORMATION PUR DEUX NIVEAU D'ACCÉLÉRATIONS SISMIQUES:

1. ZONE B - $S_{DS}$ = 1.05g
2. ZONE C - $S_{DS}$ = 1.67G

NOTE : TOUTES LES DIMENSIONS SONT DANS MILLIMETRES A MOINS QU'AUTREMENT REPUTE.



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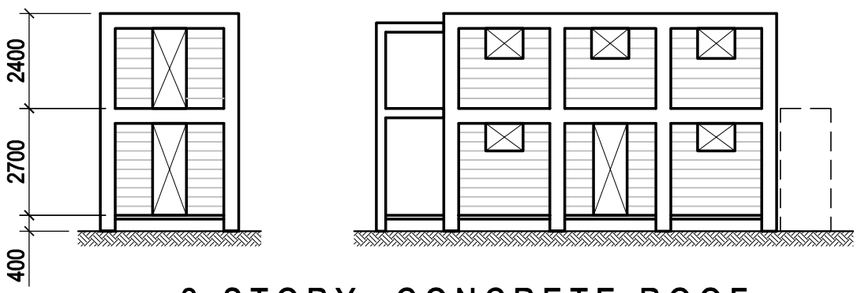
## 2-STORY, WOOD ROOF

[ Un Étage, Toit en Bois ]



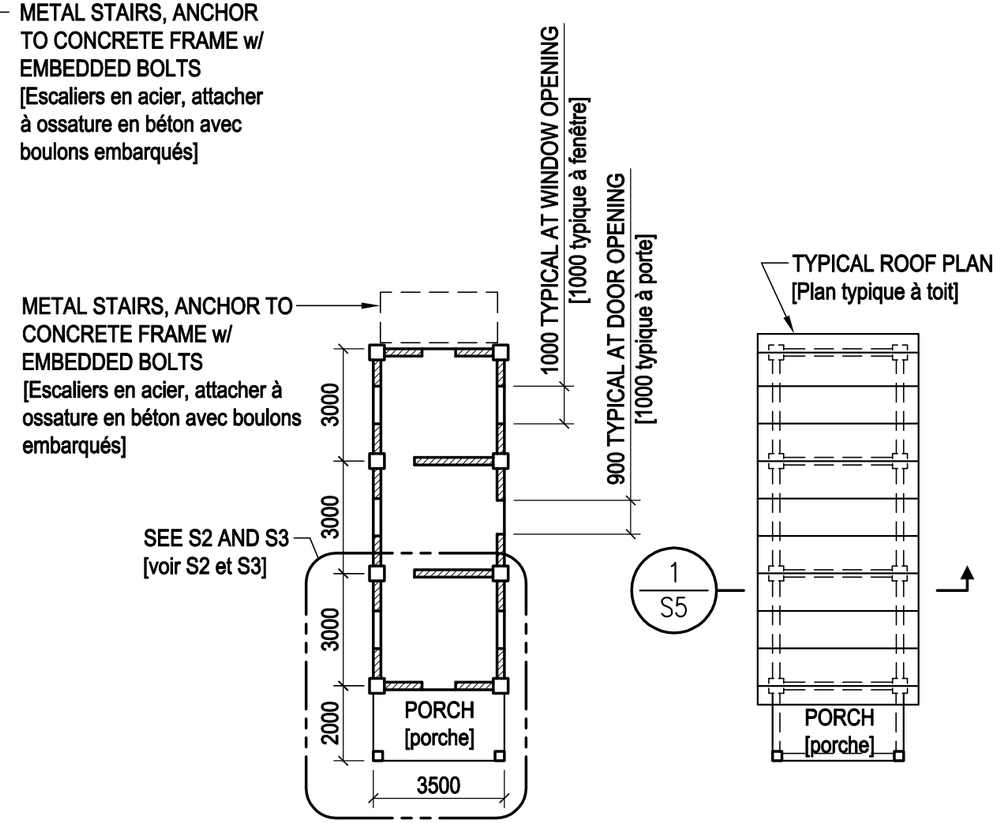

## 2-STORY, CONCRETE ROOF

[ Un Étage, Toit en Béton ]


## 3-STORY, WOOD ROOF

[ Deux Étage, Toit en Bois ]

## ELEVATIONS




## PLANS

# KAY TYPE LAYOUT

[Plans de Type Kay]

1
S1.1



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KAY TYPE PLANS AND ELEVATIONS
[Plans et Elevations de Type Kay]

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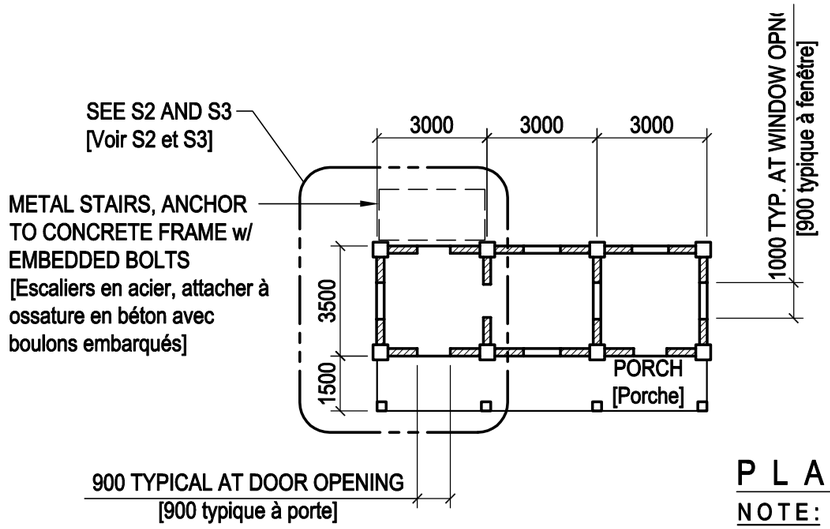
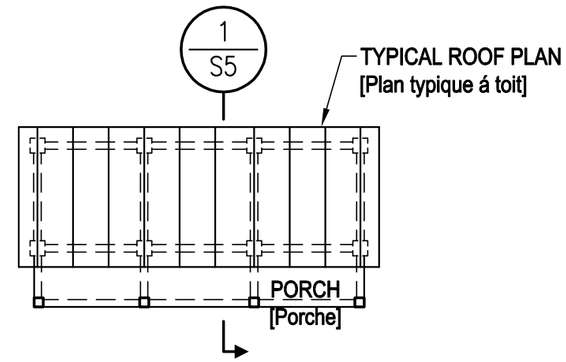


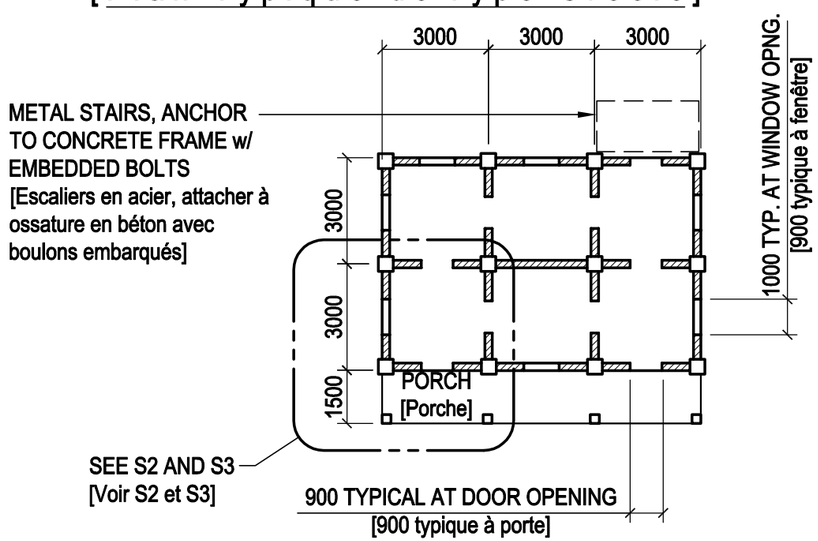

PLANS

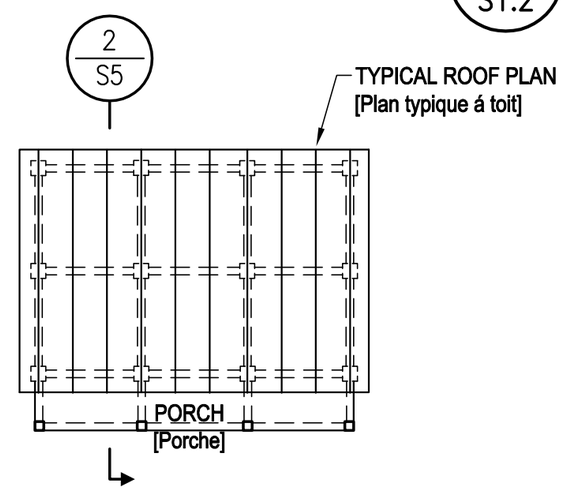
NOTE:
SEE S1.1 FOR SIM. ELEVATIONS
[ Voir S1.1 pour des elevations similaires]

# CREOLE TYPE LAYOUT

[Plan Typique de Type Creole]

1
S1.2




PLANS

NOTE:
SEE S1.1 FOR SIM. ELEVATIONS
[Voir S1.1 pour des elevations similaires]

# ALTERNATE CREOLE TYPE LAYOUT

[Plan Variante de Type Creole]

2
S1.2



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CREOLE TYPE PLANS
[ Plan de Type Creole ]

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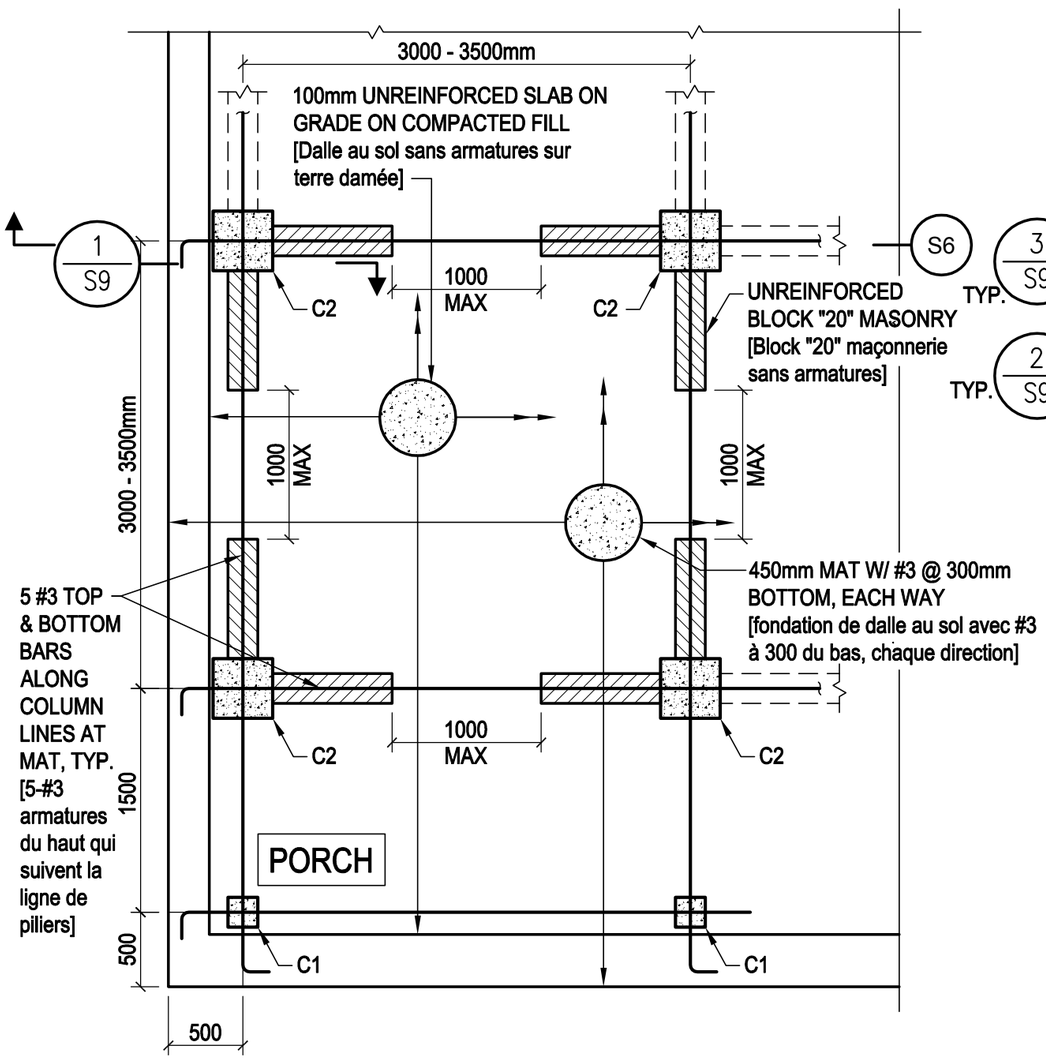
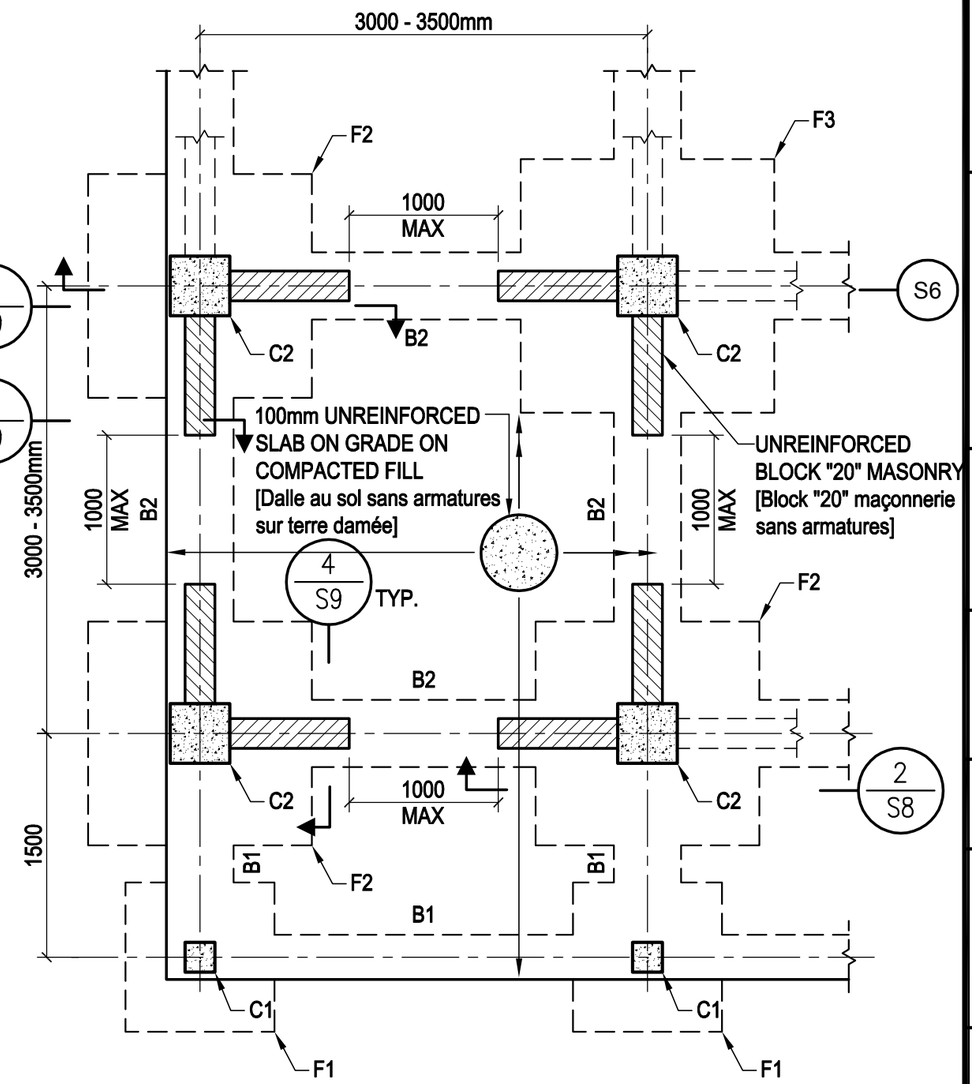
S1.2




# FOUNDATION PLAN

## ZONE B & C / SOIL BEARING CAPACITY = 50 kN / m²

[PLAN de FONDATION
ZONE B et C, CAPACITE PORTENTE du SOL = 50 kN / m² ]




SEE S7 AND S8 FOR FOUNDATION AND FRAMING SCHEDULE.
[Voir S7 et S8 pour les tableaux de fondation, poutres et poteaux]

# FOUNDATION PLAN

## ZONE B / SOIL BEARING CAPACITY = 100 kN / m²

## ZONE C / SOIL BEARING CAPACITY = 150 kN / m²

[PLAN de FONDATION
ZONE B / CAPACITE PORTENTE du SOL = 100 kN / m²
ZONE C / CAPACITE PORTENTE du SOL = 150 k N / m² ]



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TYPICAL FOUNDATION PLAN
[ Plan de Fondation ]

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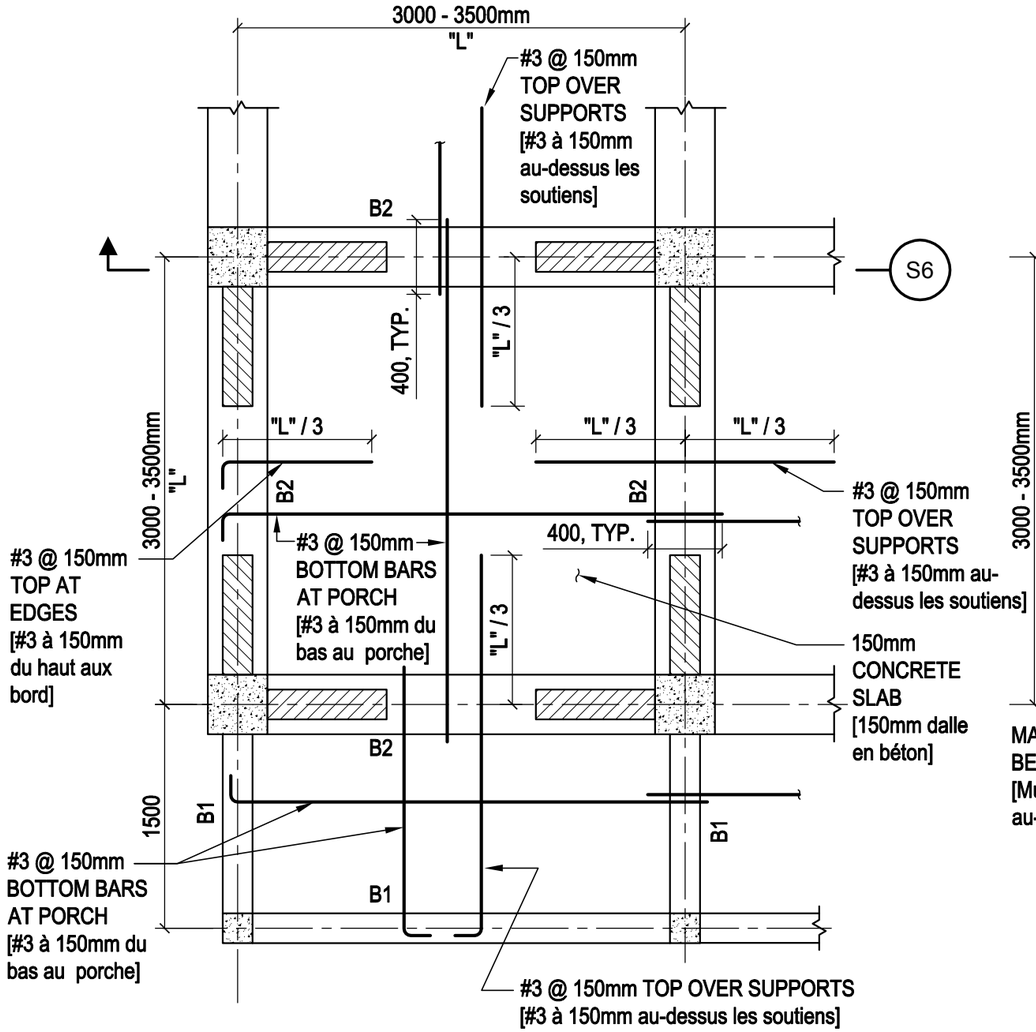
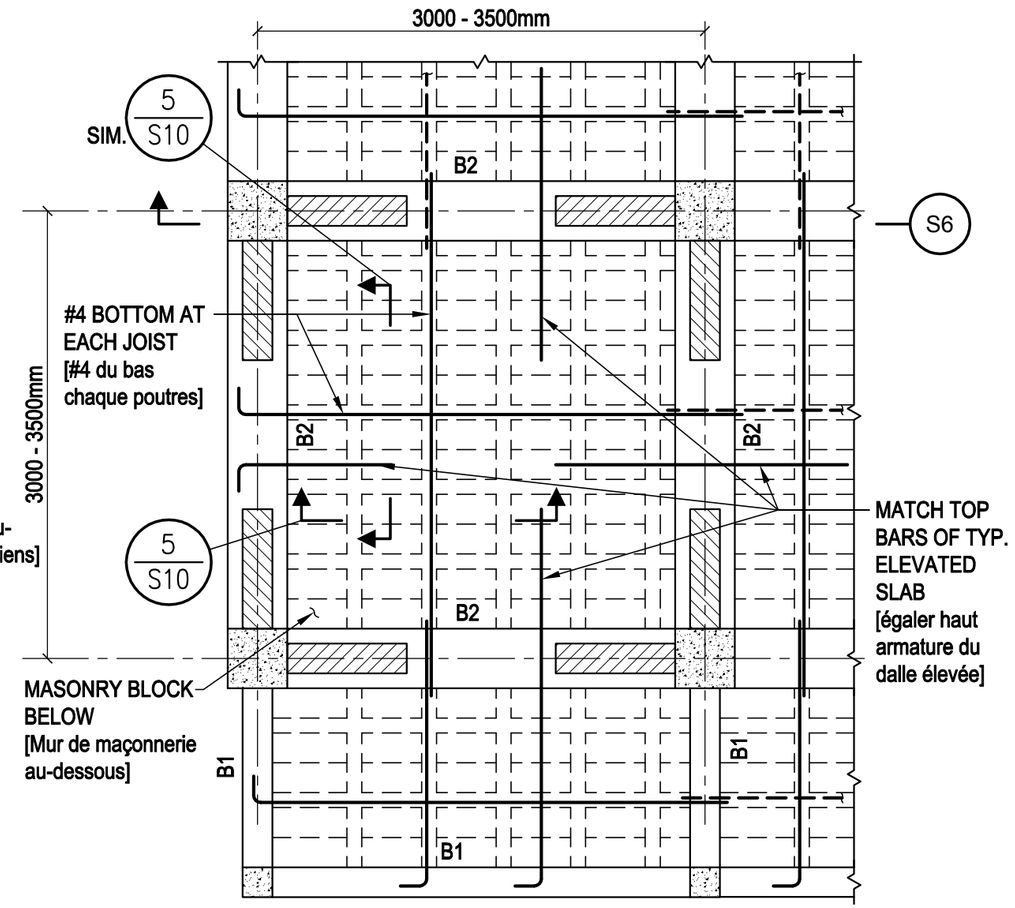
S2




SEE S8 FOR BEAM SCHEDULE
[Voir S8 pour le tableau de poutres]

## TYPICAL ELEVATED SLAB PLAN

[Plan Typique de Dalle Élevée]




SEE S8 FOR BEAM SCHEDULE
[Voir S8 pour le tableau de poutres]

## ALTERNATE ELEVATED SLAB PLAN

[Variante: Plan de Dalle Élevée]



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TYPICAL ELEVATED SLAB PLAN
[ Plan de Dalle Élevée ]

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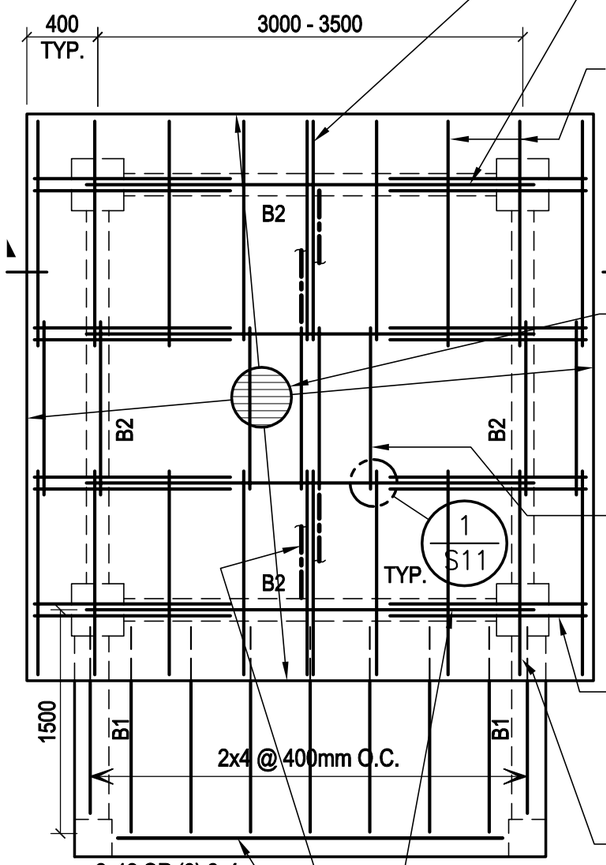
S3




2x4 FLATS @ ROOF RIDGE
[2x4 poutrelles à plat à faîte du toit]

CENTER TRUSS ON WALL BELOW, TYP. WHERE WALL OCCURS
[Charpente de toit au centre du mur, typ.]

2x4 FLAT PURLINS @ 500mm O.C. AT EAVES CONT. OVER TRUSS
[2x4 poutrelles à plat à 500 à avant-toit dépasse la charpente]

28 GA. CGI PANELS SCREWED INTO FLAT 2x4s
[Ca. 28 tôle ondulée galvaniseé vissée dans les poutrelles à plat]

2x4 FLAT PURLINS AT 1000mm O.C., STAGGERED
[2x4 poutrelles à plat à 1000, èchelonnès]

2 - 2x4 OUTRIGGERS, TYP.
[2-2x4 poutrelles à avant toit]

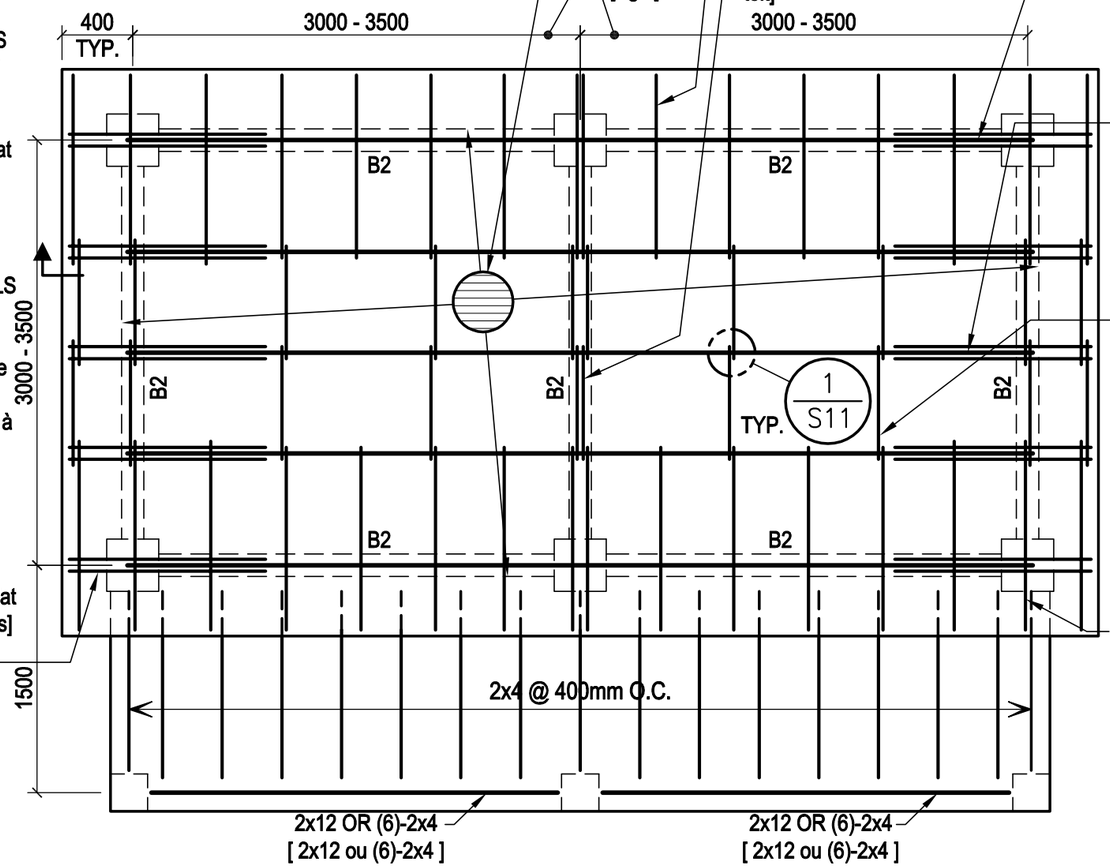
2x4 FLAT PURLIN CENTERED ON WALL BELOW, TYP.
[2x4 poutrelles à plat au centre du mur, typ.]

2x12 OR (6)-2x4
[ 2x12 ou (6)-2x4 ]

TRUSSES @ 1000 mm O.C.
[Charpentes à 1000mm]

TRUSS LATERAL BRACE @ MID-SPAN, SEE 1/S12
[Soutien latéral pour charpente à mi-portée]

## TYPICAL ROOF PLAN
## [ Plan Typique de Toit ]




28 GA. CGI PANELS SCREWED INTO FLAT 2x4s
[Ca. 28 tôle ondulée galvaniseé vissée dans les poutrelles à plat]

EQUAL
[Égal]

2x4 FLAT PURLINS @ 500mm O.C. AT EAVES CONTINUOUS OVER TRUSS
[2x4 poutrelles à plat à 500 à avant-toit dépasse la charpente]

2x4 FLATS @ ROOF RIDGE
[2x4 poutrelles à plat à faîte du toit]

CENTER TRUSS ON WALL BELOW, TYP. WHERE WALL OCCURS
[Charpente de toit au centre du mur, typ.]

TRUSSES @1000mm O.C.
[Charpente à 1000mm]

2x4 FLAT PURLINS @ 1000mm O.C., STAGGERED
[2x4 poutrelles à plat à 100mm, échelonens]

2x4 FLAT PURLIN CENTERED ON WALL BELOW, TYP.
[2x4 poutrelles à plat au centre du mur, typ.]

## ALTERNATE ROOF PLAN
## [ Variante: Plan de Toit ]



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TYPICAL ROOF PLAN
[ Plan Typique de Toit ]

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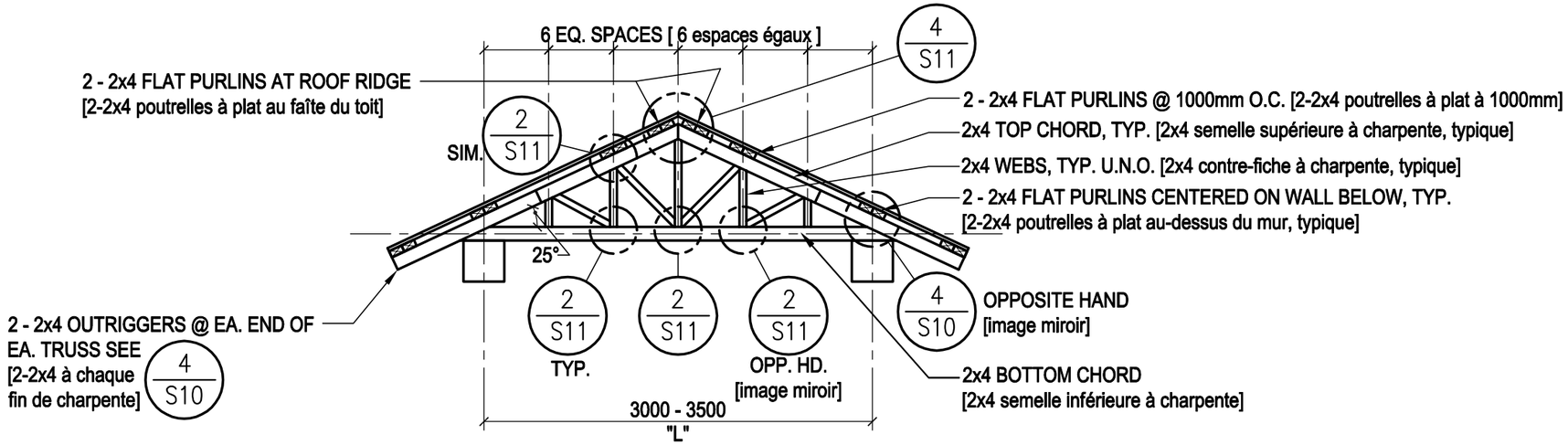
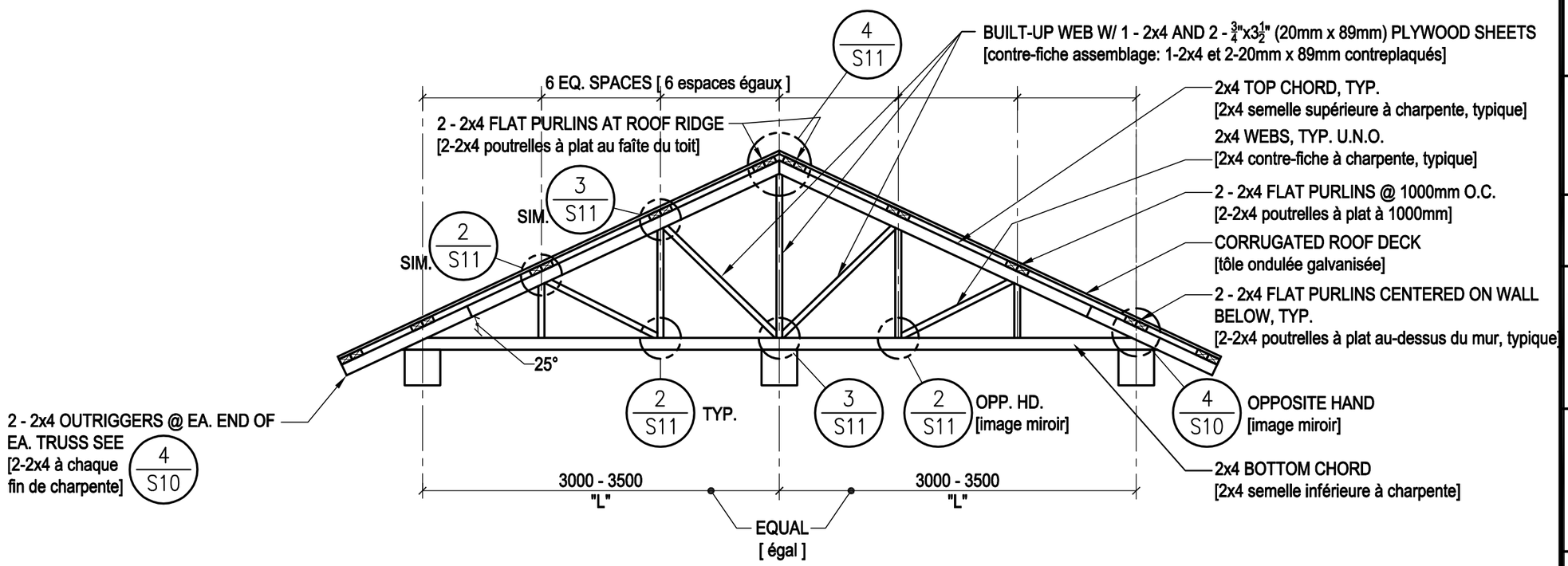
S4




# ROOF TRUSS ELEVATION - TYPICAL ROOF PLAN

[ Charpente de Toit Élévation - Plan Typique ]




# ROOF TRUSS ELEVATION - ALTERNATE ROOF PLAN

[ Charpente de Toit Élévation - Plan Variante ]



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ROOF TRUSS ELEVATIONS
[ Charpente de Toit Élévations ]

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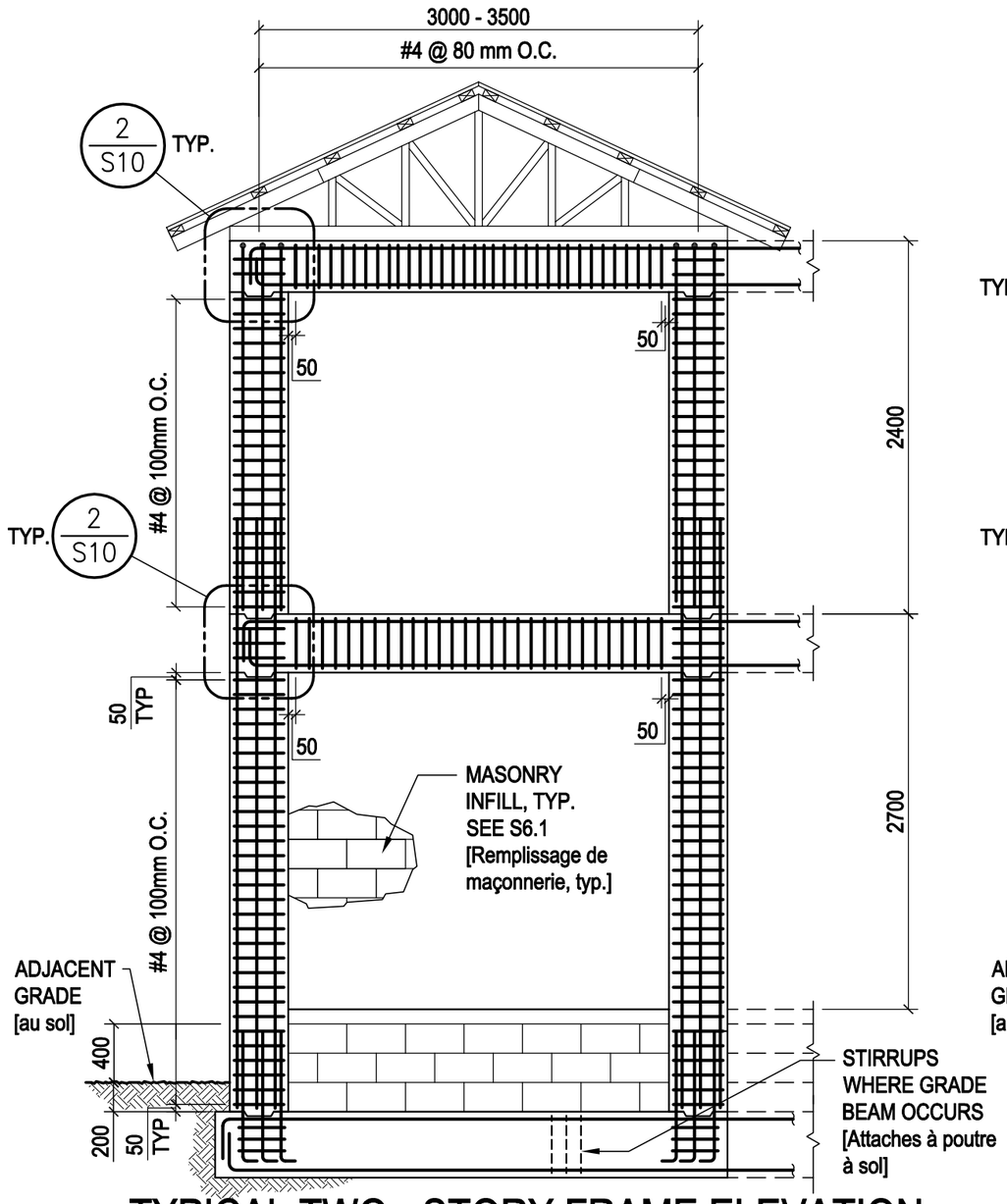
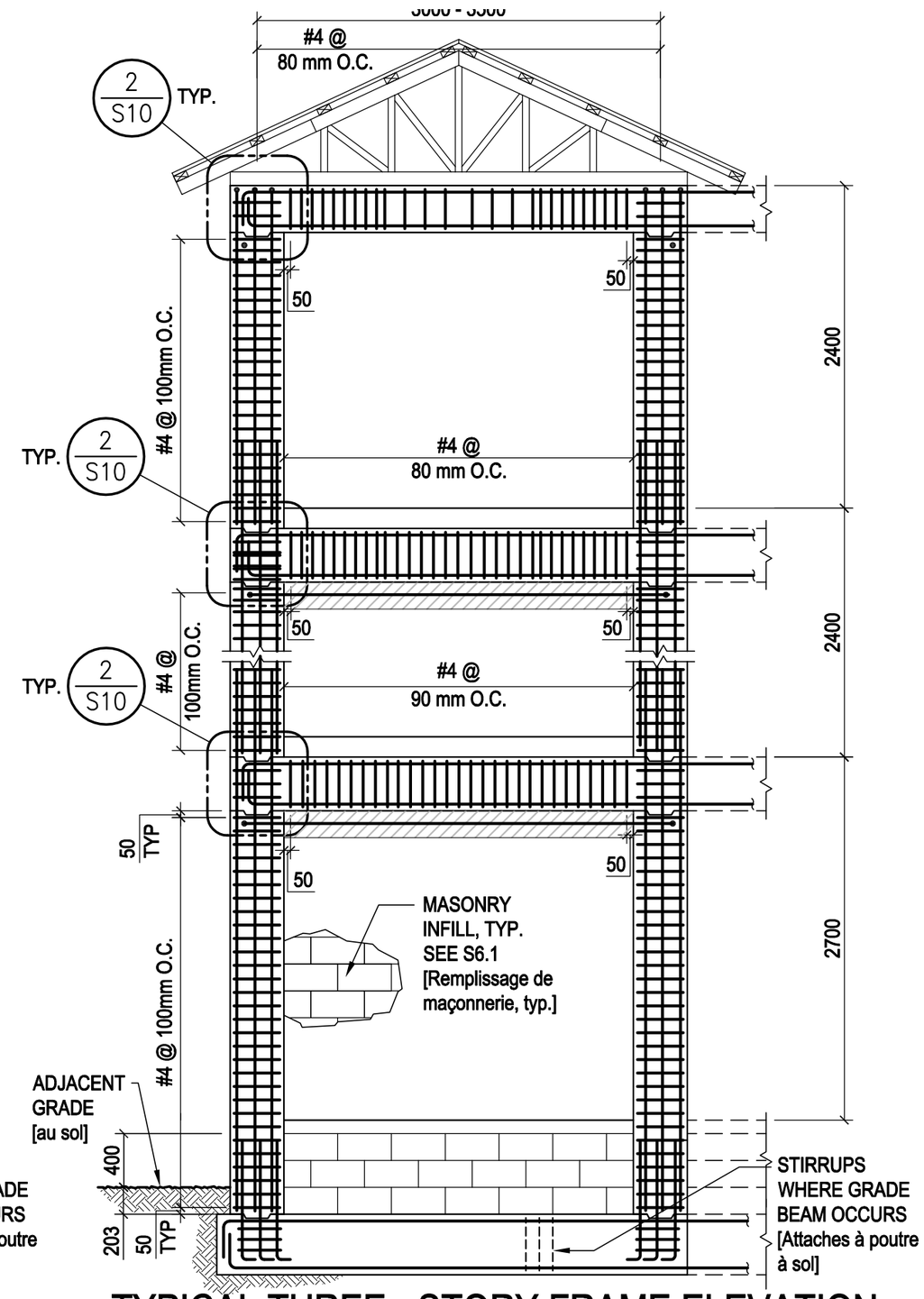



## TYPICAL TWO - STORY FRAME ELEVATION

[ Ossature Béton Typique Pour Bâtiments à Un Étage ]




## TYPICAL THREE - STORY FRAME ELEVATION

[ Ossature Béton Typique Pour Bâtiments à Deux Étage ]



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TYPICAL 2 & 3 STORY WALL ELEVATIONS
[ Ossature Béton Typique, Un et Deux Étages ]

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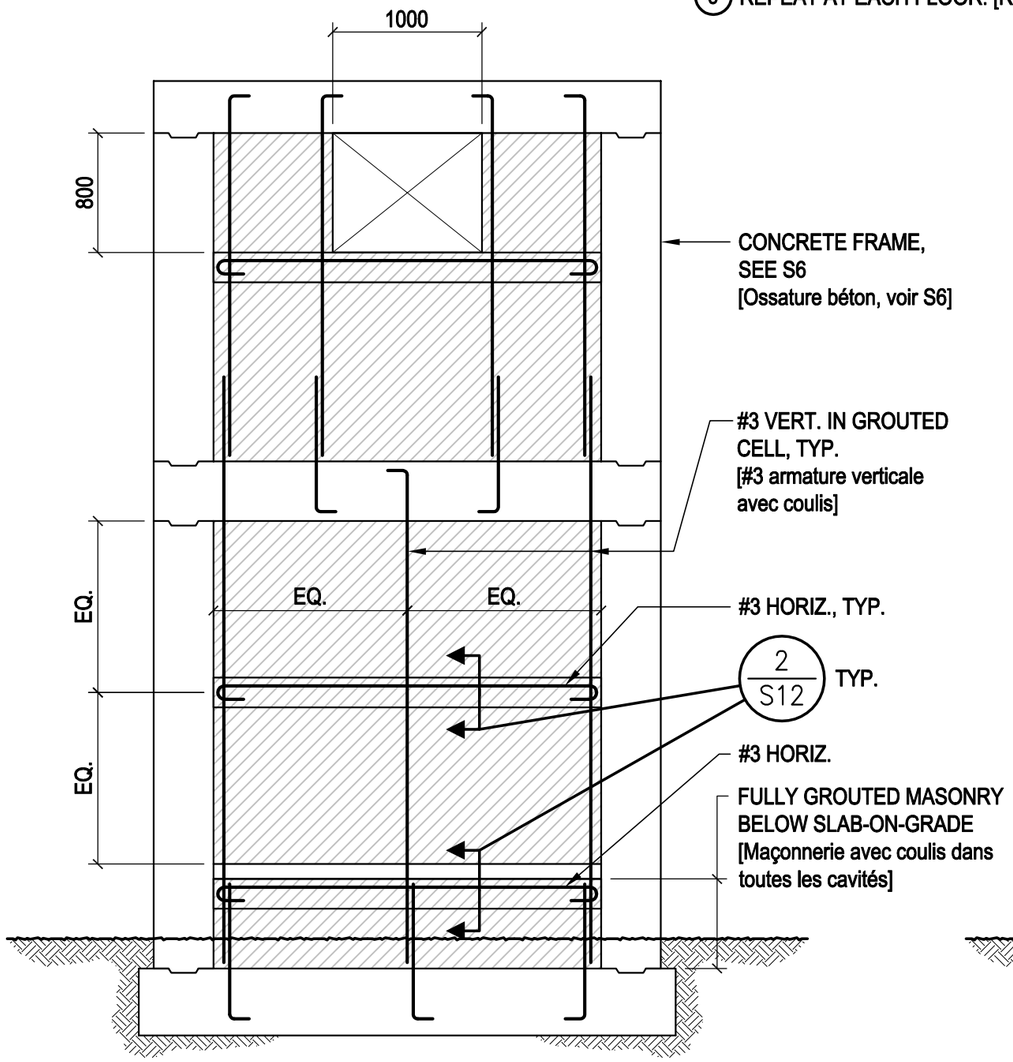
INFILL CONSTRUCTION SEQUENCE:
[Séquence de constuction de remplissage]:

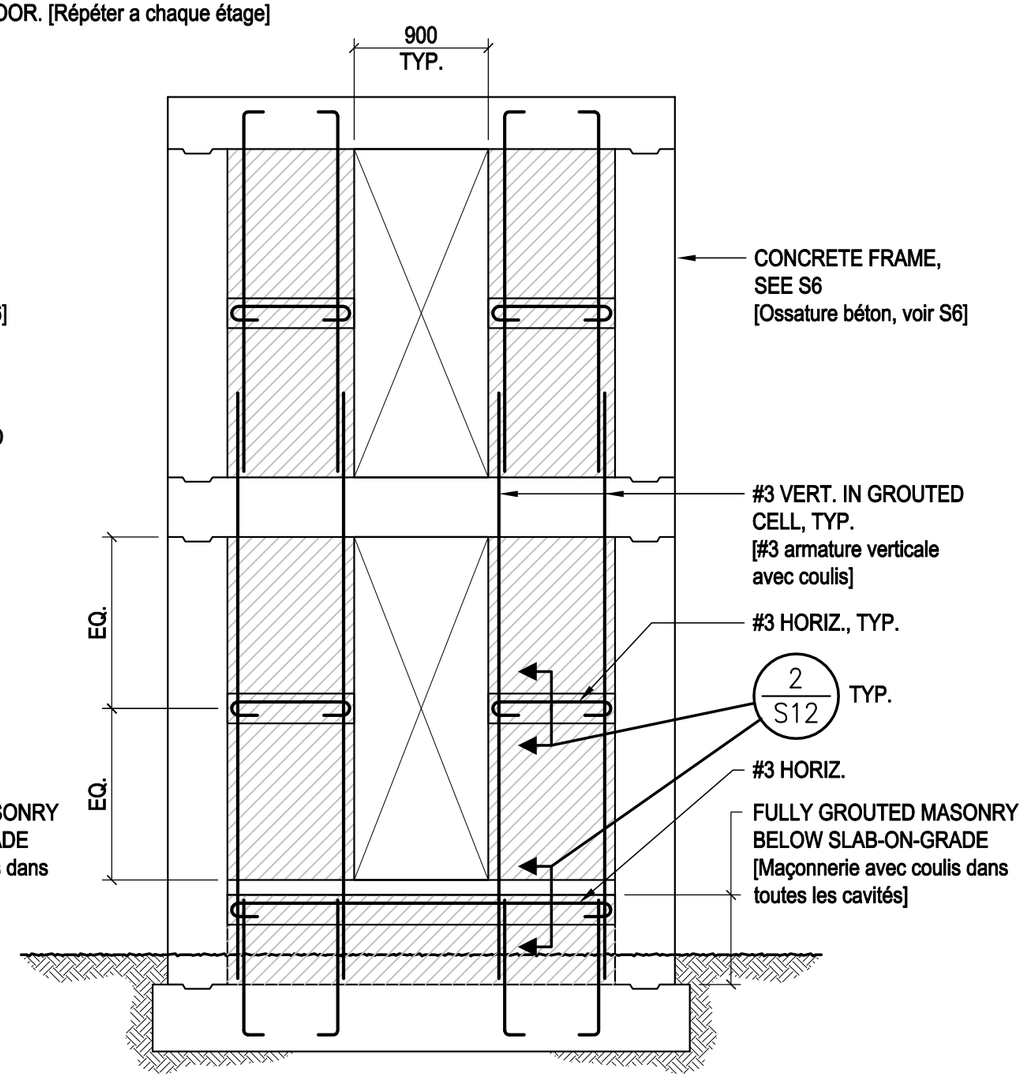
1. PLACE DOWELS IN FOUNDATION [Mettre en place les goujons dans le fontation]
2. CAST FRAME COLUMNS. [Couler les poeaux d'ossature]
3. CONSTRUCT INFILL w/ REINFORCING AND GROUTING. [Construire le remplissage avec armatures et coulis]
4. CAST FRAME BEAMS. [Couler les poutre d'ossature]
5. REPEAT AT EACH FLOOR. [Répéter a chaque étage]




## TYP. INFILL – SOLID OR WITH INFILL

1:40 [ Remplissage Typique de Maçonnerie ]

2 / S6.1




## TYPICAL INFILL WITH DOORS

1:40 [ Remplissage Typique Avec Porte ]

1 / S6.1



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[ Élévations Typiques de Remplissage ]

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## FOOTING SCHEDULE
### [ Tableau de Fondation ]

ZONE B / SOIL BEARING CAPACITY = 100 kN/m$^2$
[Zone B / Capacite Portante du sol = 100 kN/m$^2$]

| COL. MARK [Numéro de Fondation] | B = L* | DEPTH [Profondeur] H | REINFORCING [Armatures] | | REMARKS [Notes] |
|---|---|---|---|---|---|
| | | | BOTT. [Bas] | TOP [Haut] | |
| F1 | 1250 | 400 | 6#3 E.W. | – | 3/S9 |
| F2 | 2000 | 400 | 9#3 E.W. | – | 3/S9 |
| F3 | 2250 | 400 | 10#3 E.W. | – | 3/S9 |

* FOOTING PLAN DIMENSIONS

## FOOTING SCHEDULE
### [ Tableau de Fondation ]

ZONE C / SOIL BEARING CAPACITY = 150 kN/m$^2$
[Zone C / Capacite Portante du sol = 150 kN/m$^2$]

| COL. MARK [Numéro de Fondation] | B = L* | DEPTH [Profondeur] H | REINFORCING [Armatures] | | REMARKS [Notes] |
|---|---|---|---|---|---|
| | | | BOTT. [Bas] | TOP [Haut] | |
| F1 | 1100 | 450 | 6#3 E.W. | – | 3/S9 |
| F2 | 1750 | 450 | 8#3 E.W. | – | 3/S9 |
| F3 | 2000 | 450 | 9#3 E.W. | – | 3/S9 |

* FOOTING PLAN DIMENSIONS

# FOUNDATION SCHEDULES
## [TABLEAUX DE FONDATIONS]

1 / S7

## CONCRETE COLUMN SCHEDULE – ZONE B
### [ Tableau de Poteau Beton – Zone B ]

* LIMITED ZONE SEISMICITY LEVEL, $S_{DS}$ = 1.05g
["Limited Zone" Charge Sismique, $S_{DS}$ = 1.05g]

| COL. MARK [Numéro de Poteau] | B = D | LONG. REINF. [Armatures longitudinales] | LATERAL REINF. [Armatures Transversales] | REMARKS [Notes] |
|---|---|---|---|---|
| C1 | 250 | 4 – #5 | #4 @100 | SEE S6 [Voir S6] |
| C2 | 350 | 8 – #5 | #4 @100 | SEE S6 [Voir S6] |

## CONCRETE COLUMN SCHEDULE – ZONE C
### [ Tableau de Poteau Beton – Zone C ]

* LIMITED ZONE SEISMICITY LEVEL, $S_{DS}$ = 1.67g
["Limited Zone" Charge Sismique, $S_{DS}$ = 1.67g]

| COL. MARK [Numéro de Poteau] | B = D | LONG. REINF. [Armatures longitudinales] | LATERAL REINF. [Armatures Transversales] | REMARKS [Notes] |
|---|---|---|---|---|
| C1 | 250 | 4 – #5 | #4 @100 | SEE S6 [Voir S6] |
| C2 | 400 | 8 – #6 | #4 @100 | SEE S6 [Voir S6] |

# CONCRETE COLUMN SCHEDULES
## [TABLEAUX DE POTEAU BÉTON]

2 / S7



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[ TABLEAUX ]

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## CONCRETE BEAM SCHEDULE
## ZONE B
## [ Tableau de Poutre Beton – Zone B ]

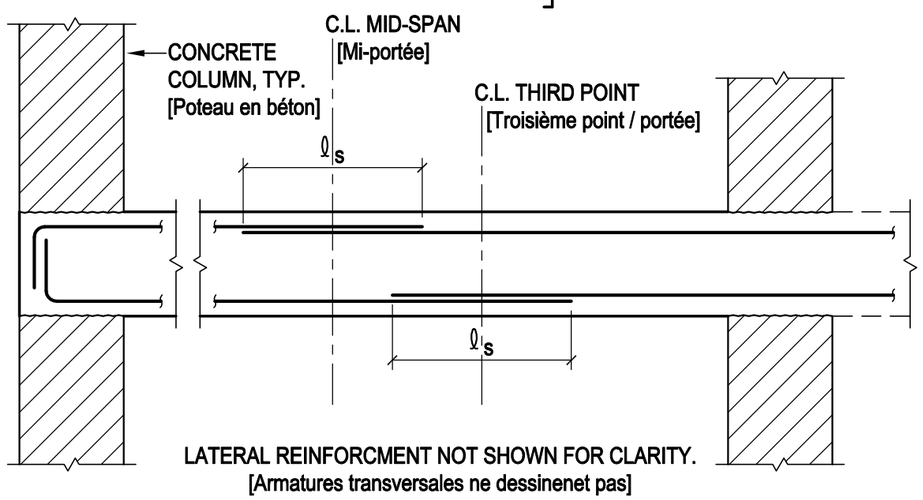
| BEAM MARK [numéro de poutre] | LEVEL [niveau] | B = D | LONG. REINFORCING [armatures longitudinales] | | LATERAL REINF. [armatures transversales] | REMARKS [notes] |
|---|---|---|---|---|---|---|
| | | | TOP [haut] | BOTT. [bas] | | |
| B1 | GRADE [sol] | 300 | 2 – #5 | 2 – #5 | #3 @ 250mm O.C. | [voir] SEE 2/– & 4/– |
| | 2 | 250 | 2 – #5 | 2 – #5 | #3 @ 150mm O.C. | [voir] SEE 4/– |
| | 3 | 250 | 2 – #5 | 2 – #5 | #3 @ 150mm O.C. | [voir] SEE 4/– |
| | ROOF [toit] | 250 | 2 – #5 | 2 – #5 | #3 @ 150mm O.C. | [voir] SEE 4/– |
| B2 | GRADE [sol] | 400 | 2 – #6 | 2 – #6 | #3 @ 250mm O.C. | [voir] SEE 2/– & 4/– |
| | 2 | 350 | 2 – #6 | 2 – #6 | SEE S6 [voir S6] | [voir] SEE 4/– |
| | 3 | 300 | 2 – #6 | 2 – #6 | SEE S6 [voir S6] | [voir] SEE 4/– |
| | ROOF [toit] | 300 | 2 – #6 | 2 – #6 | SEE S6 [voir S6] | [voir] SEE 4/– |

## CONCRETE BEAM SCHEDULE
## ZONE C
## [ Tableau de Poutre Beton – Zone C ]

| BEAM MARK [numéro de poutre] | LEVEL [niveau] | B = D | LONG. REINFORCING [armatures longitudinales] | | LATERAL REINF. [armatures transversales] | REMARKS [notes] |
|---|---|---|---|---|---|---|
| | | | TOP [haut] | BOTT. [bas] | | |
| B1 | GRADE [sol] | 300 | 2 – #5 | 2 – #5 | #3 @ 250mm O.C. | [voir] SEE 2/– & 4/– |
| | 2 | 250 | 2 – #5 | 2 – #5 | #3 @ 150mm O.C. | [voir] SEE 4/– |
| | 3 | 250 | 2 – #5 | 2 – #5 | #3 @ 150mm O.C. | [voir] SEE 4/– |
| | ROOF [toit] | 250 | 2 – #5 | 2 – #5 | #3 @ 150mm O.C. | [voir] SEE 4/– |
| B2 | GRADE [sol] | 450 | 3 – #5 | 3 – #5 | #3 @ 250mm O.C. | [voir] SEE 2/– & 4/– |
| | 2 | 400 | 2 – #6 | 2 – #6 | SEE S6 [voir S6] | [voir] SEE 4/– |
| | 3 | 350 | 2 – #6 | 2 – #6 | SEE S6 [voir S6] | [voir] SEE 4/– |
| | ROOF [toit] | 300 | 2 – #6 | 2 – #6 | SEE S6 [voir S6] | [voir] SEE 4/– |

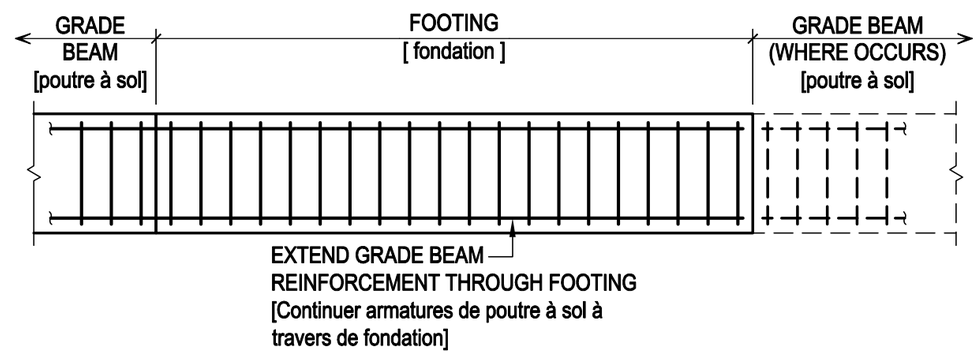
# CONCRETE BEAM SCHEDULES
## [ Tableau de Poutre Beton ]

1 / S8




## BEAM REINFORCING DIAGRAM
1:20 [ Armatures à Poutre ]

4 / S8




## TYP. GRADE BEAM/FOOTING INTERSECTION
1:20 [ Détail à Carrefour de Poutre à Sol et Fondation ]

2 / S8



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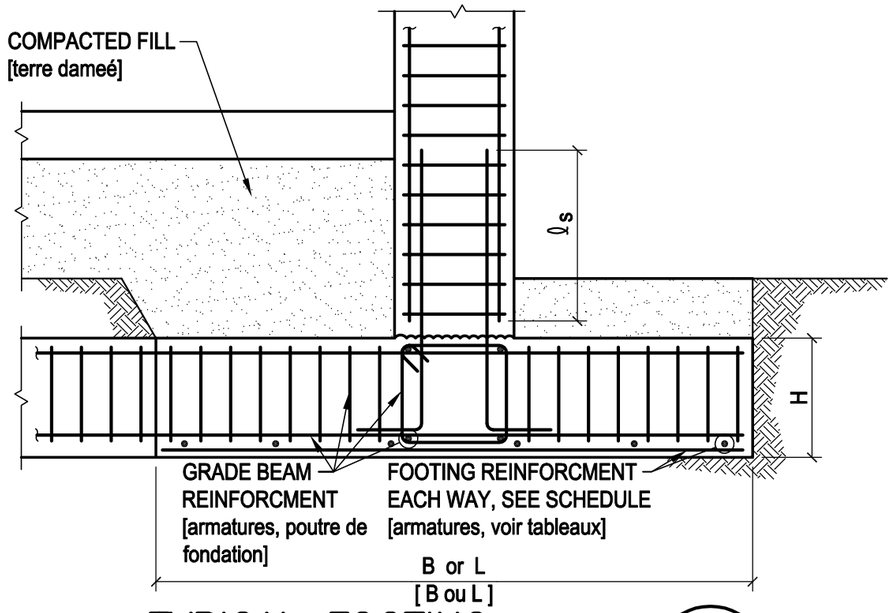
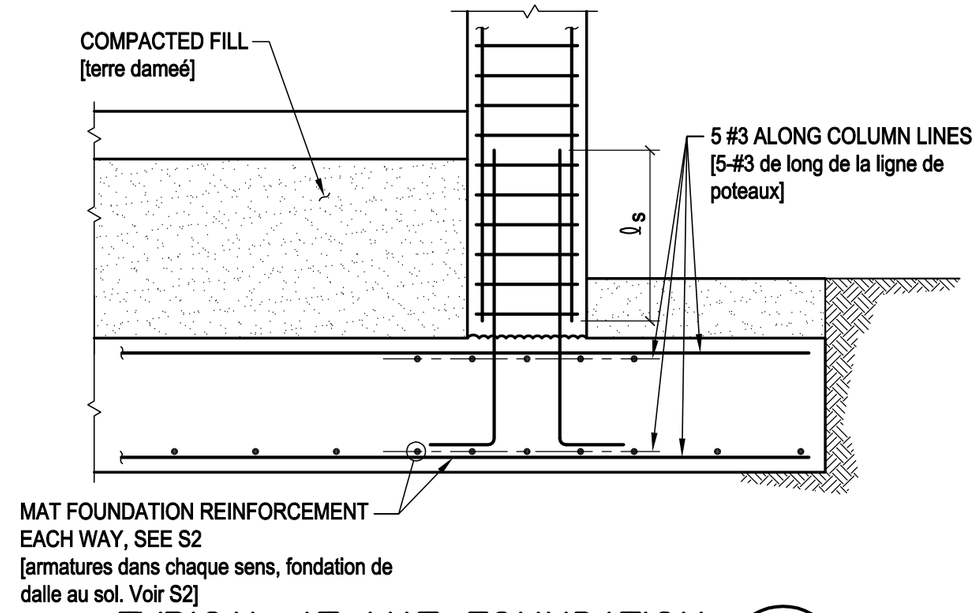



## TYPICAL FOOTING

1:20 [ Fondation Typique ]

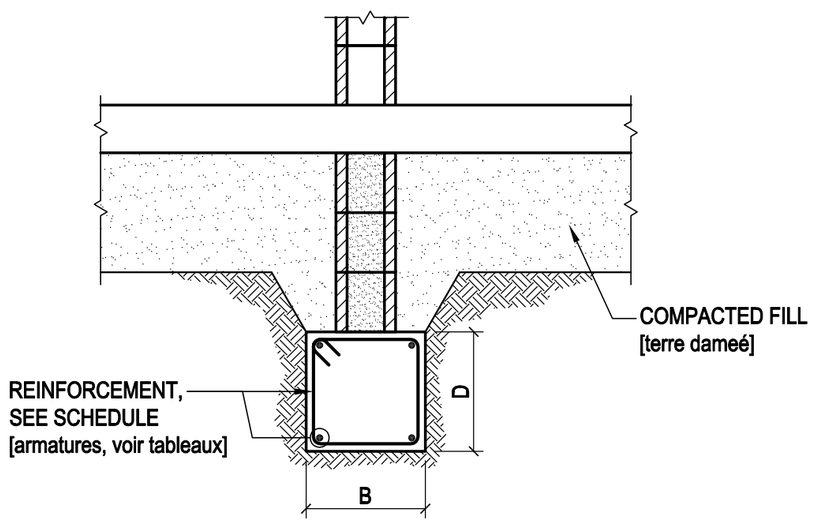
3 / S9




## TYPICAL AT MAT FOUNDATION

1:20 [ Fondation de Dalle au Sol ]

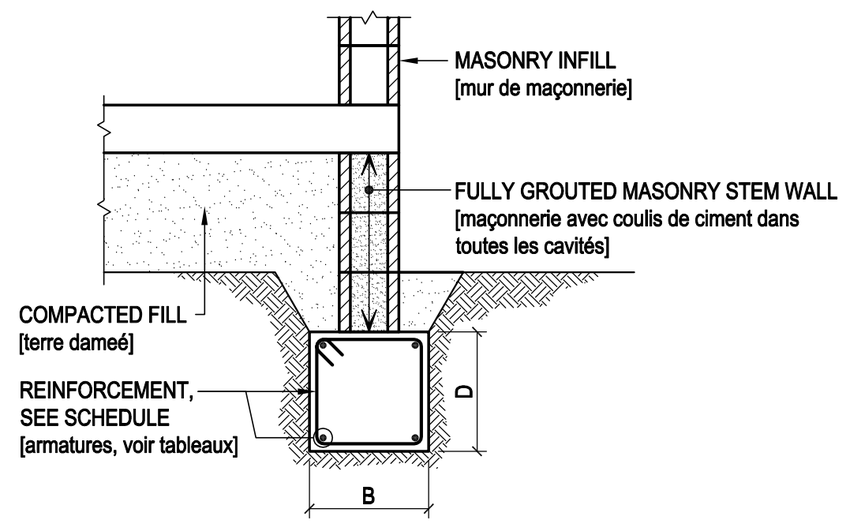
1 / S9




## TYPICAL GRADE BEAM

1:20 [ Poutre à Sol Typique ]

4 / S9




## EDGE DETAIL

1:20 [ Détail au Bord ]

2 / S9



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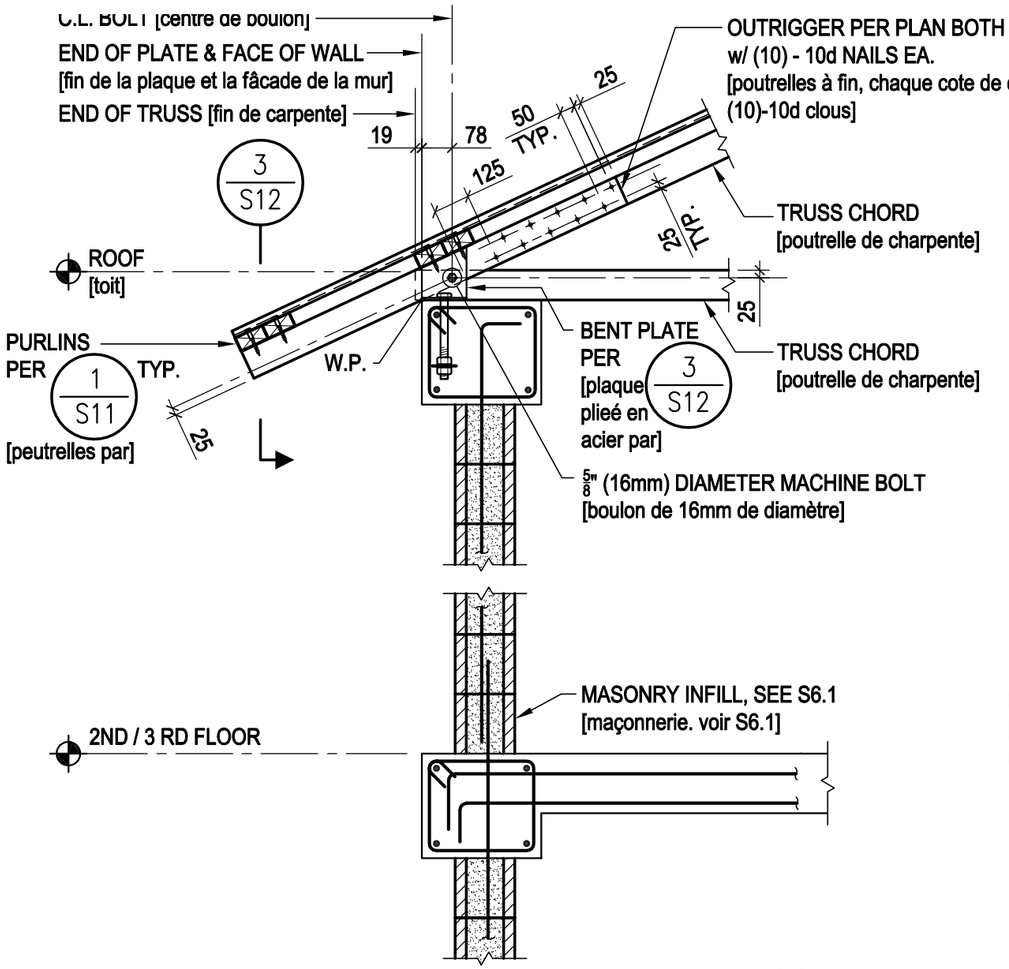
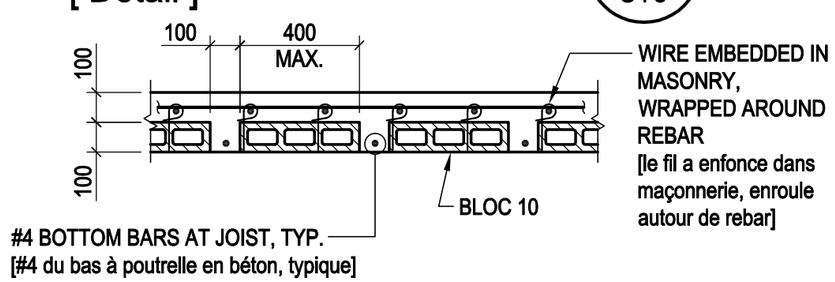


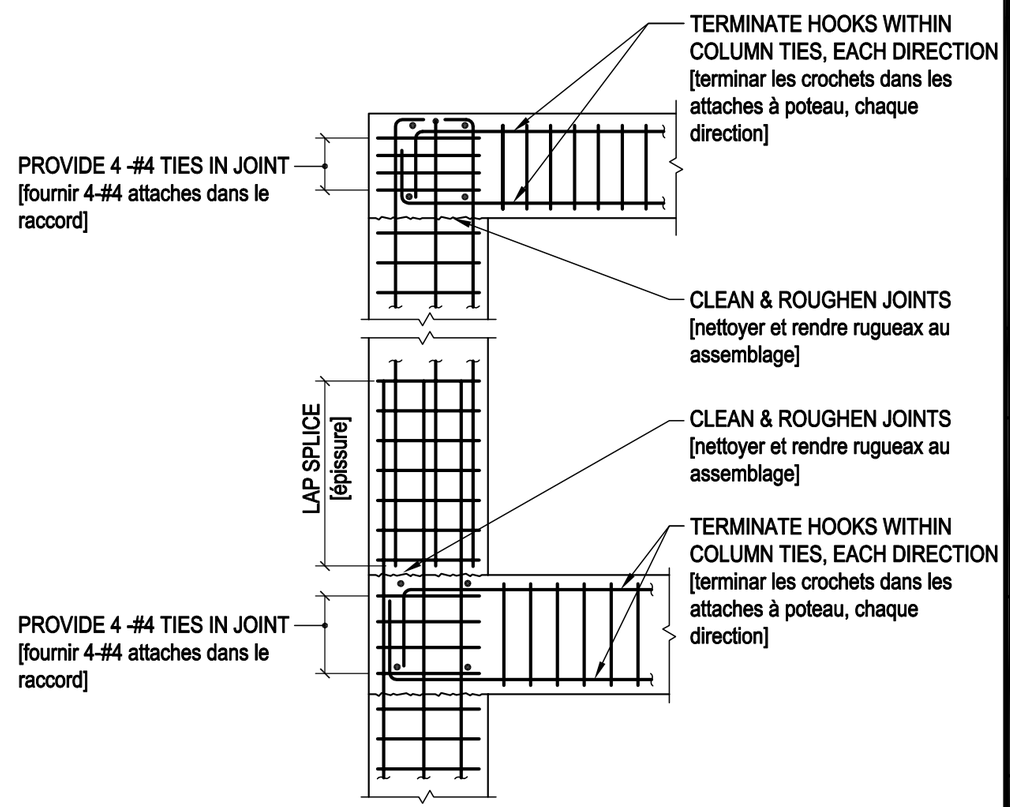

## SECTION 4/S10
[ Détail ] 1:20

| BAR SIZE [armature] | LAP SPLICE LENGTH $\ell_s$ [longueur d'épissure] |
|---|---|
| #3 | 400 |
| #4 | 400 |
| #5 | 400 |
| #6 | 700 |


## LAP SPLICE TABLE & HOOK LENGTH 1/S10
[ Tableau d'Épissure et Longueur de Crochet ]
NOT TO SCALE




## SECTION AT SLAB 5/S10
[ Détail à Dalle ]
1:20




## BEAM / COLUMN JOINT 2/S10
[ Raccord Entre Poutre et Poteau en Bèton ]
1:20



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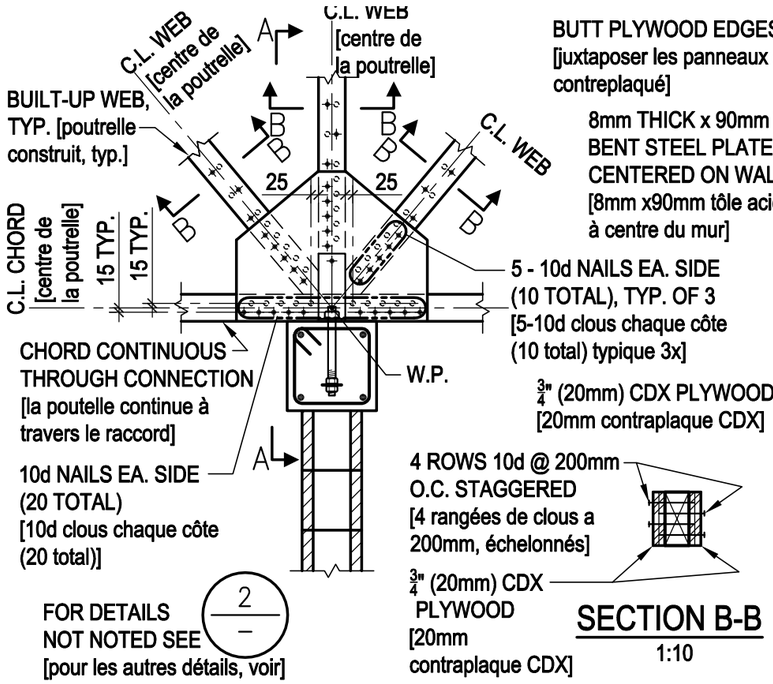
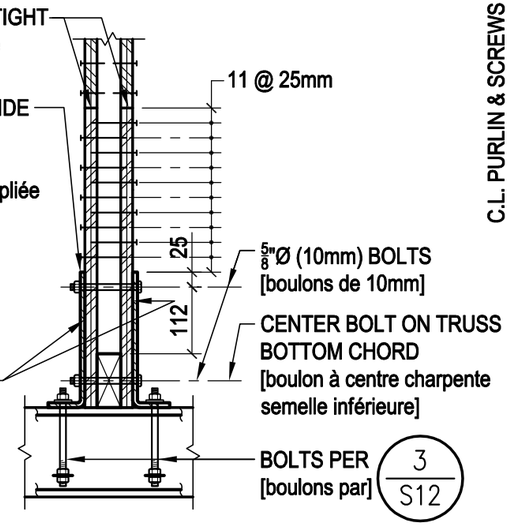
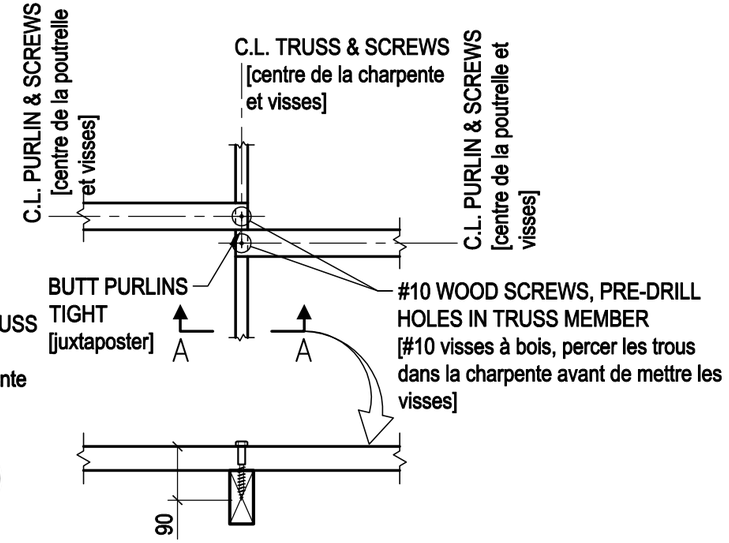



## SECTION B-B
1:10

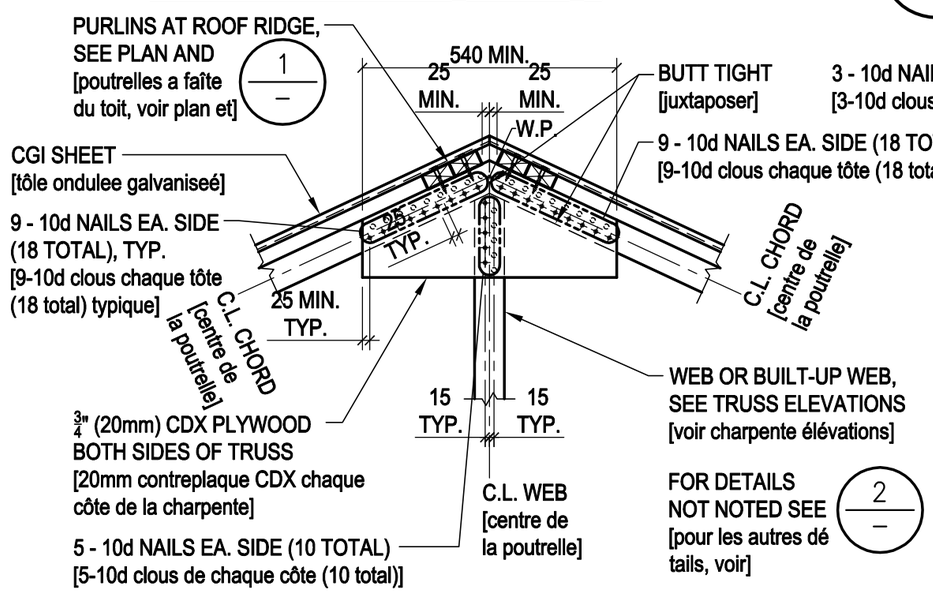



## SECTION A-A
1:10

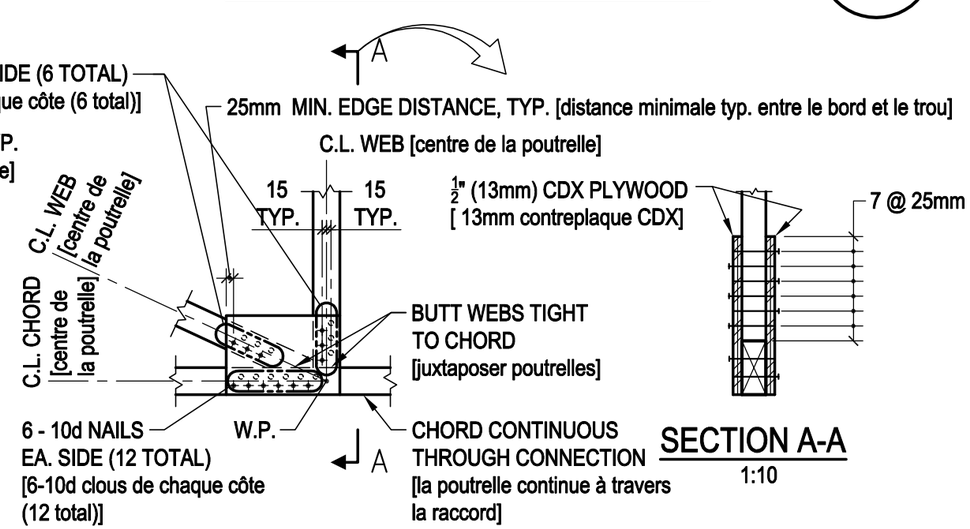



## SECTION A-A
1:10

## TRUSS CONNECTION AT BUILT-UP WEBS (3 / S11)
1:20 [ Raccord de Charpente à Mi-Portée ]




## PURLIN TO TRUSS CONNECTION (1 / S11)
1:20 [ Raccord Entre Poutrelle et Charpente ]




## SECTION A-A
1:10

## TRUSS CONNECTION AT RIDGE (4 / S11)
1:20 [ Raccord de Charpente au Faîte du Toit ]

## TYP. TRUSS CONNECTION (2 / S11)
1:20 [ Raccord de Charpente, Typique ]



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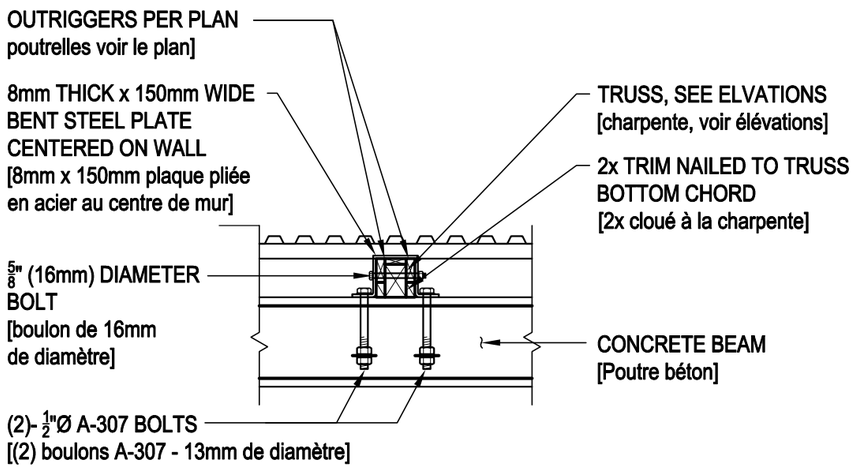
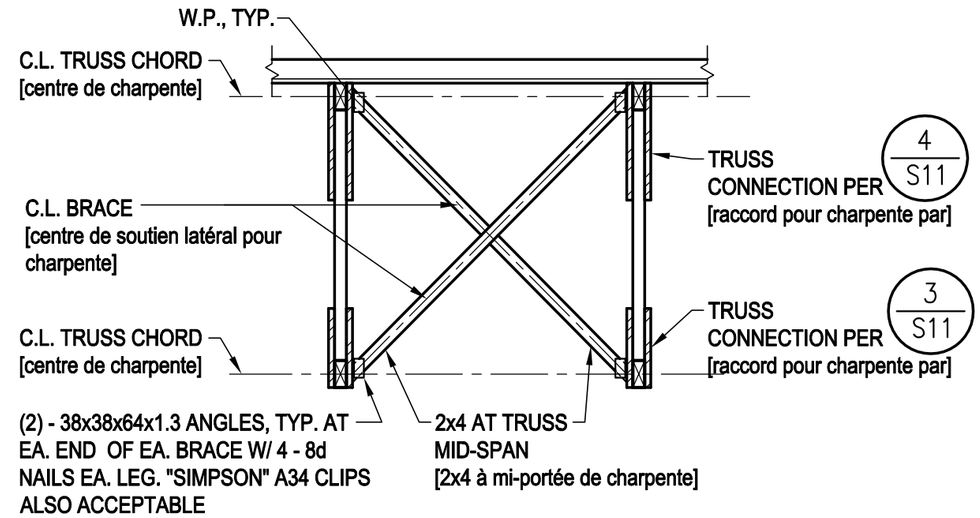


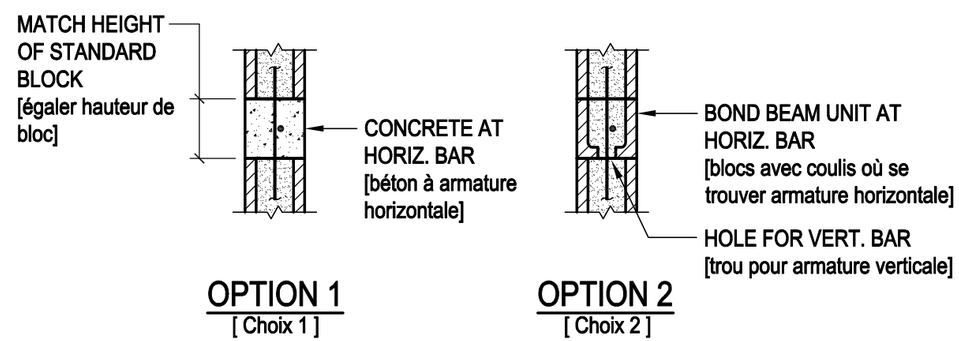

## TRUSS END CONNECTION 3/S12

[ Raccord de Charpente à Mur ] 1:20




## TRUSS LATERAL BRACING 1/S12

[ Soutien Latéral Pour Charpente ] 1:20




## HORIZONTAL BAR IN MASONRY WALL 2/S12

[ Armatures Horizontale dans Mur de Maçonnerie ] 1:20



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