7. CAD DRAWINGS

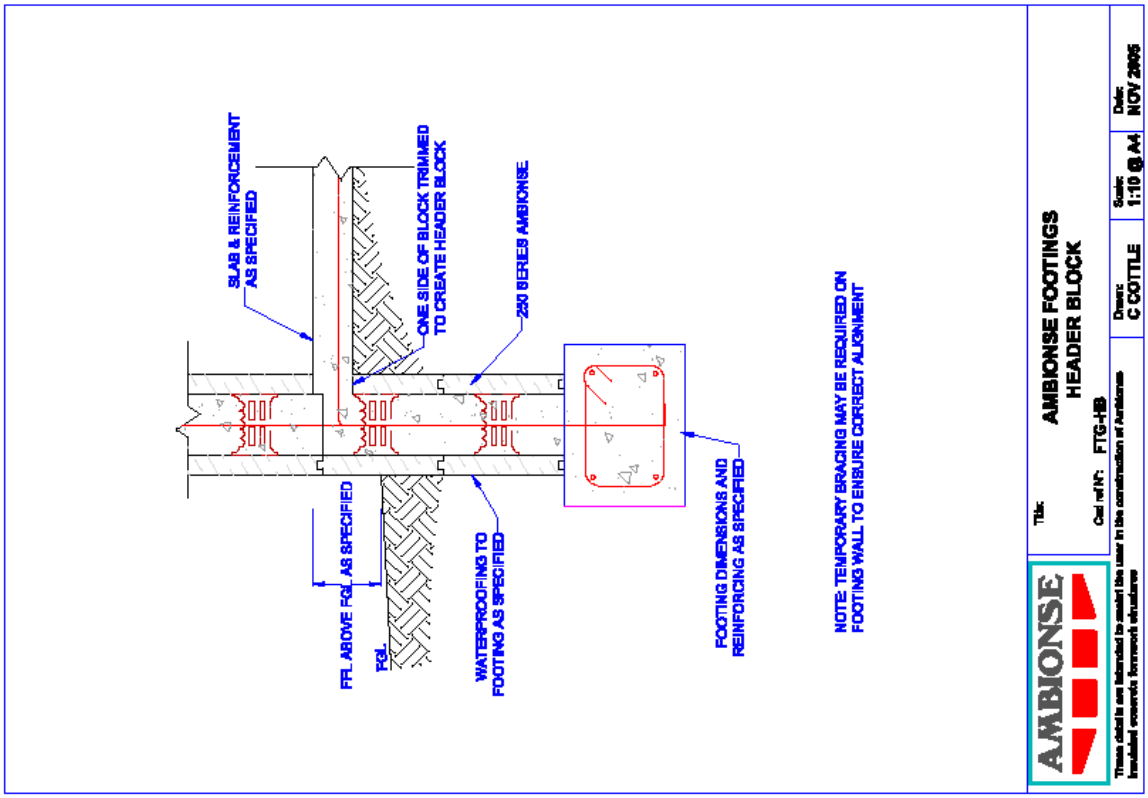
These drawings are intended to assist the user in the construction of Ambionse insulated concrete formwork structures. They can be downloaded as PDF's or DWG format files on www.ambionse.co.nz

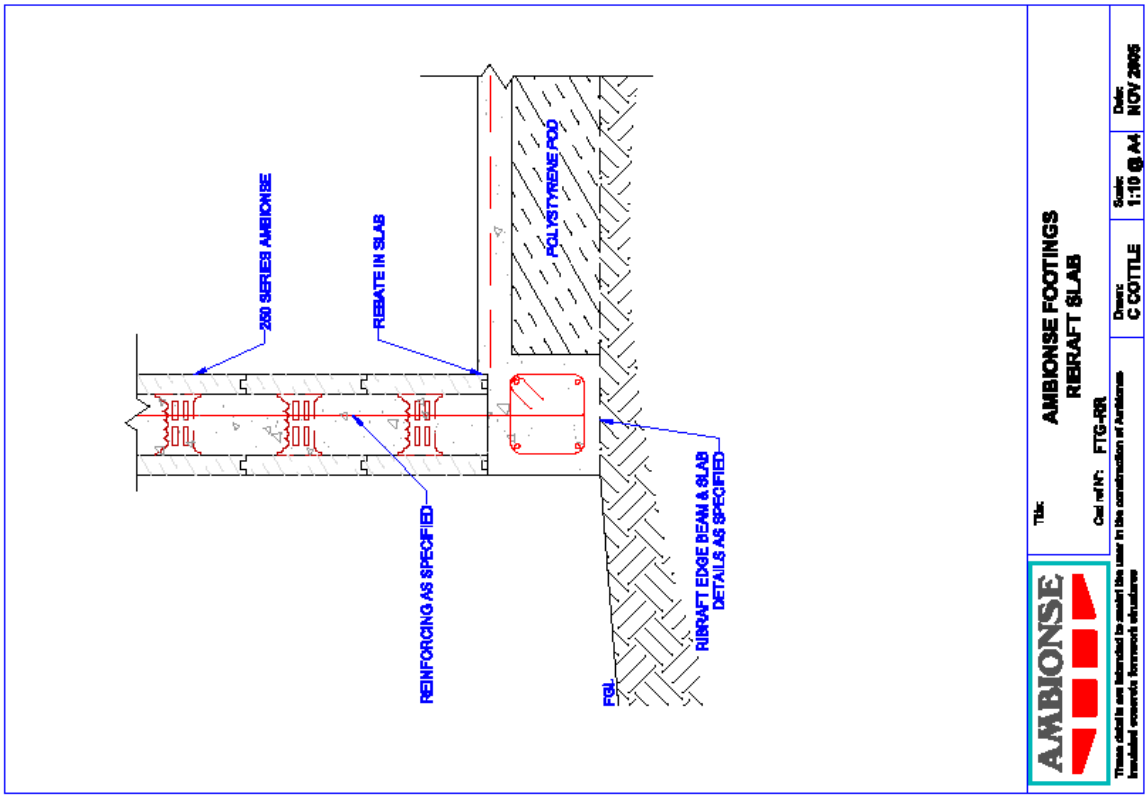
Ambionse Footings
Ambionse as a Header Block
RibRaft Footings
Stepped/Sloping Footings
Brick Veneer Footings

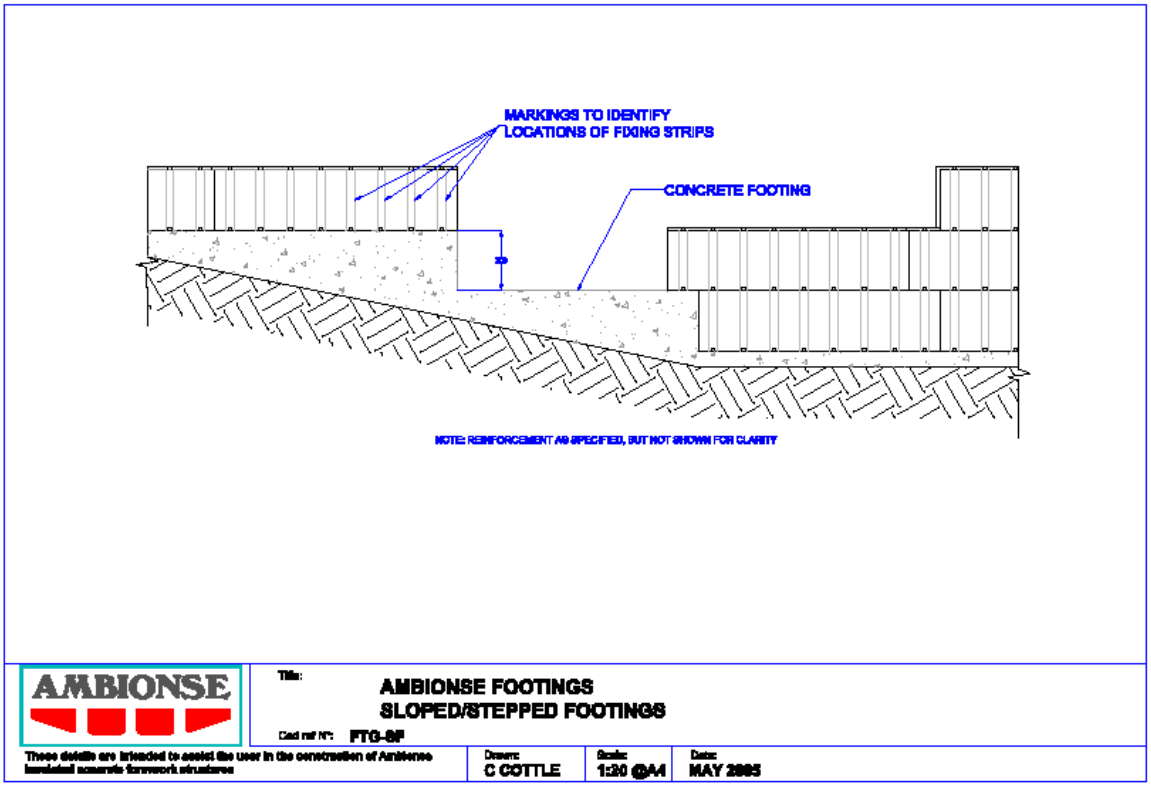
Connection to Other Structures
Concrete Suspended Floor Connection
Intersecting Walls
Timber Mid-floor Connection
Connection to Timber Truss

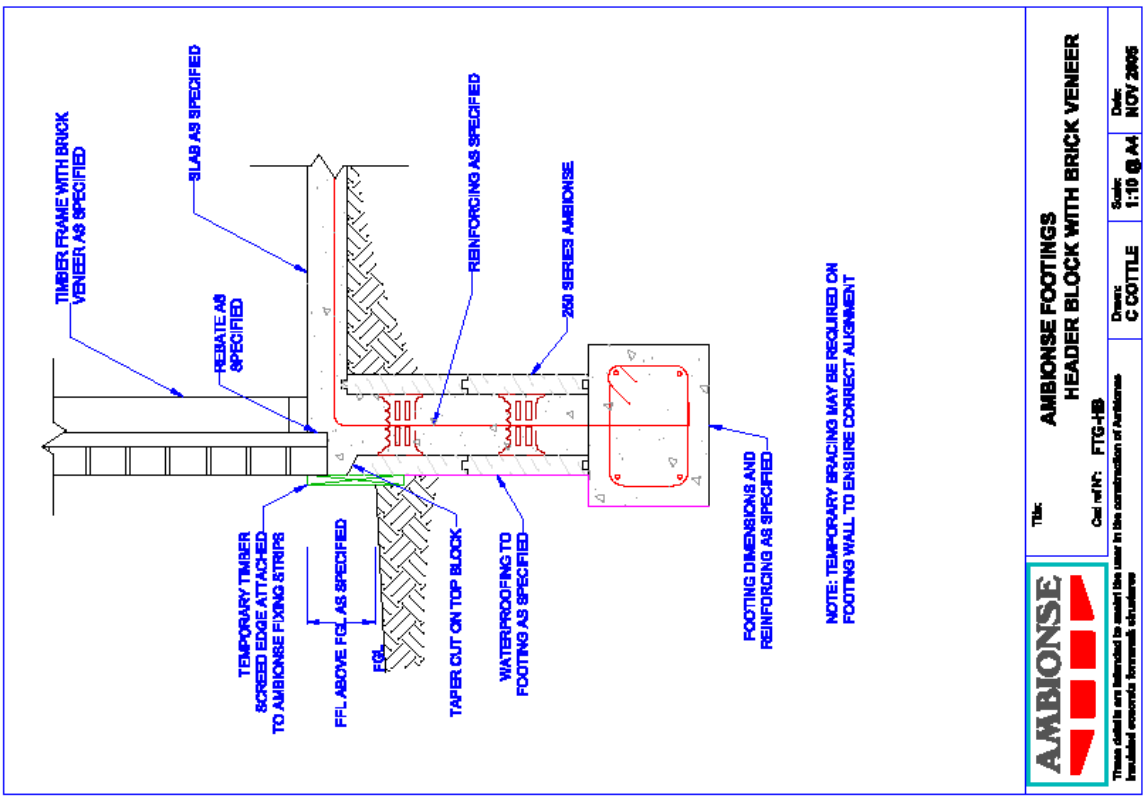
Constructing Openings
Forming Rebate
Head and Jamb Details
Sill Block Details
Arched Openings
Bracing Openings
Formed Opening

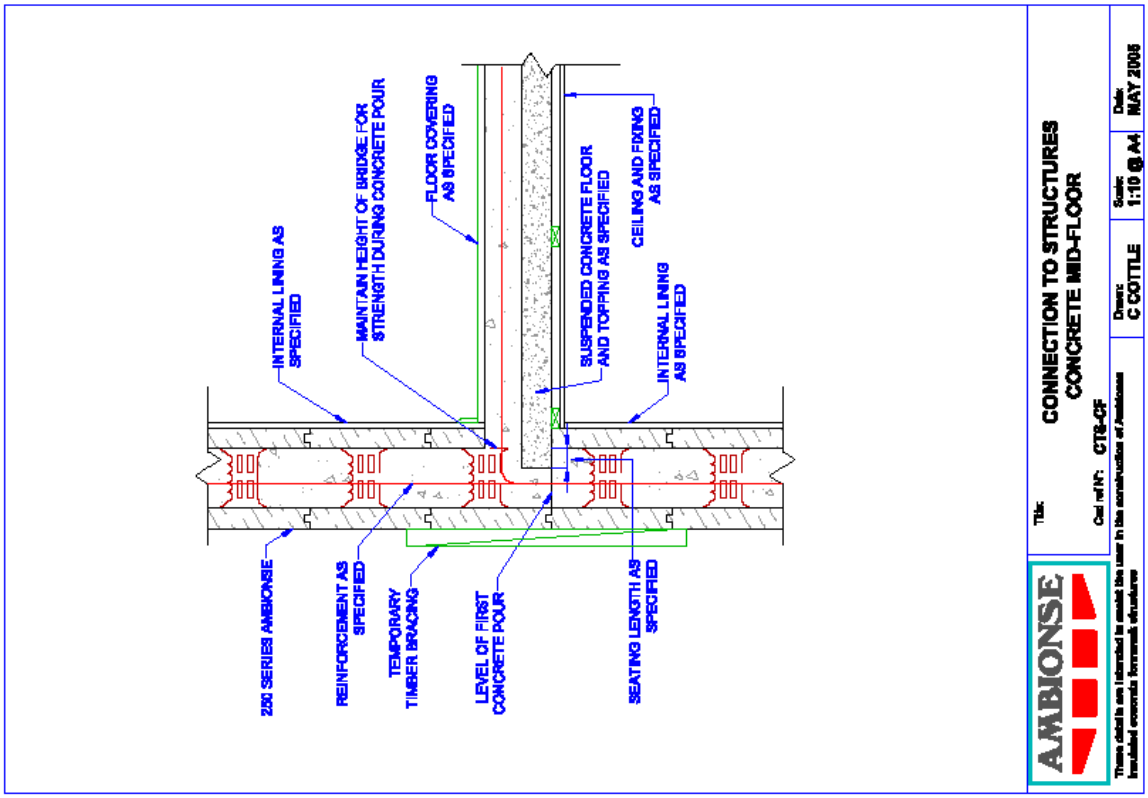
Miscellaneous
Waterproofing Retaining Walls
Typical Cross Section
Creating Curves

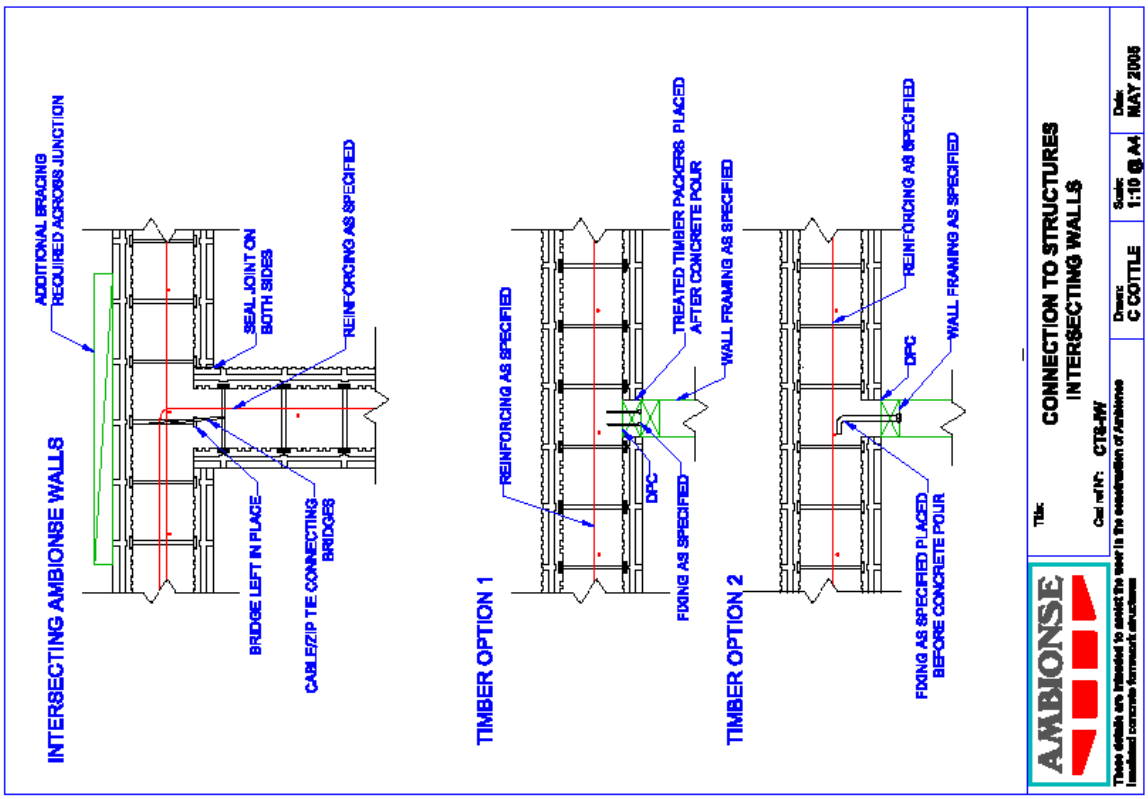

SLAB & REINFORCEMENT AS SPECIFIED
ONE SIDE OF BLOCK TRIMMED TO CREATE HEADER BLOCK
230 SERIES AMBIONSE
FFL ABOVE FGL AS SPECIFIED
FGL
WATERPROOFING TO FOOTING AS SPECIFIED
FOOTING DIMENSIONS AND REINFORCING AS SPECIFIED
NOTE: TEMPORARY BRACING MAY BE REQUIRED ON FOOTING WALL TO ENSURE CORRECT ALIGNMENT
AMBIONSE
Title: AMBIONSE FOOTINGS HEADER BLOCK
Cad ref'n: FTG-HB
Drawn: C COTTLE
Scale: 1:10 @ A4
Date: NOV 2005
These details are intended to assist the user in the construction of Ambionse Insulated concrete formwork structures

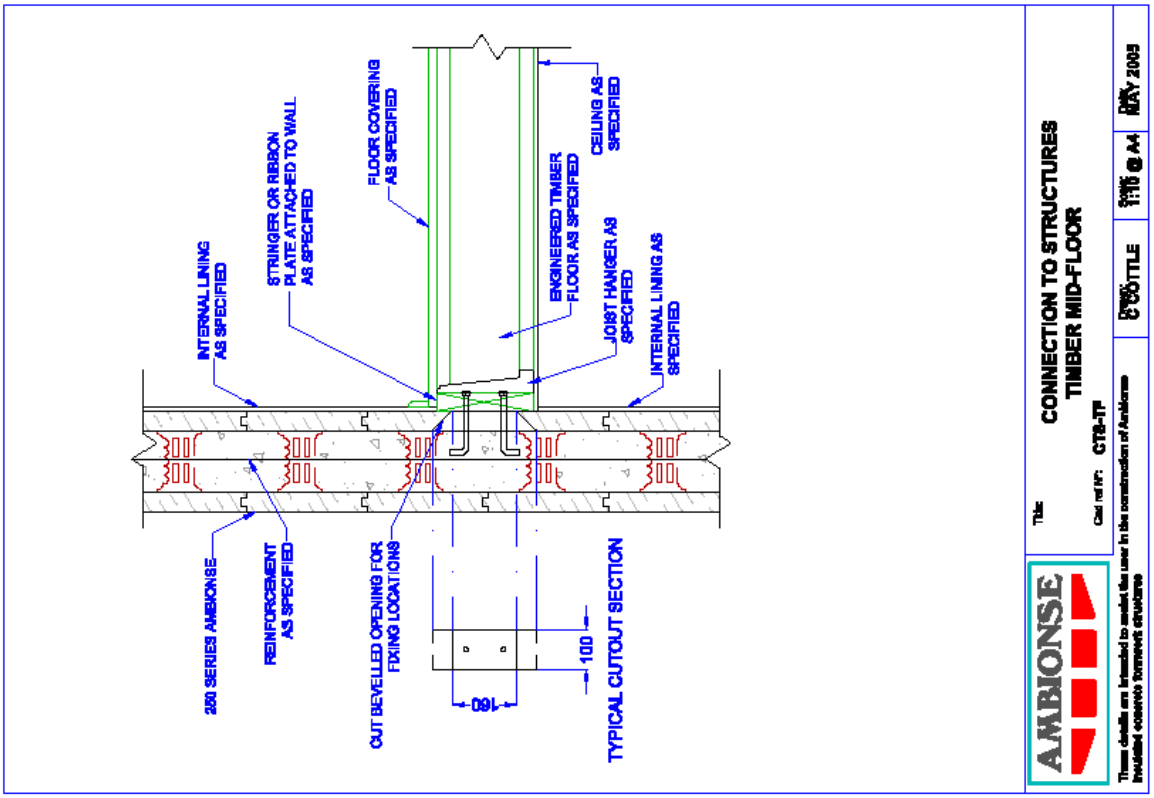

230 SERIES AMBIONSE
REBATE IN SLAB
POLYSTYRENE POD
REINFORCING AS SPECIFIED
RIBRAFT EDGE BEAM & SLAB DETAILS AS SPECIFIED
FGL
AMBIONSE
Title: AMBIONSE FOOTINGS RIBRAFT SLAB
Cad ref'n: FTG-RR
Drawn: C COTTLE
Scale: 1:10 @ A4
Date: NOV 2005
These details are intended to assist the user in the construction of Ambionse Insulated concrete formwork structures

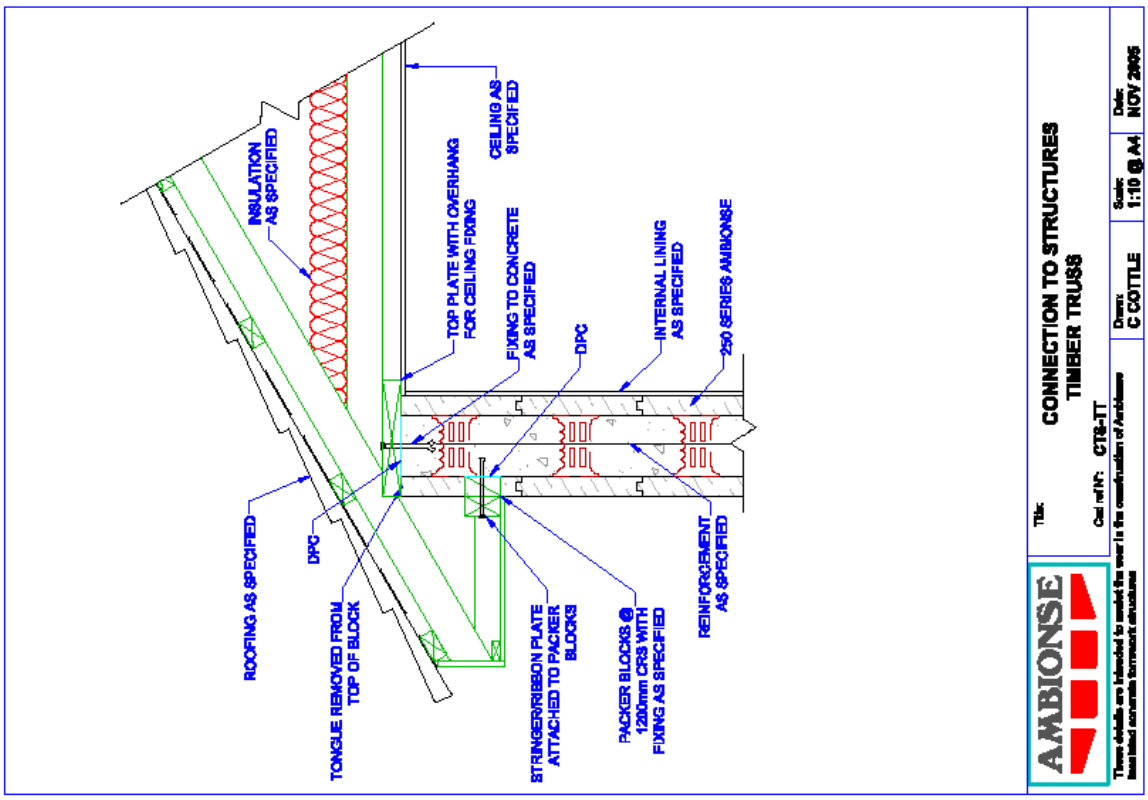

MARKINGS TO IDENTIFY
LOCATIONS OF FIXING STRIPS
CONCRETE FOOTING
NOTE: REINFORCEMENT AS SPECIFIED, BUT NOT SHOWN FOR CLARITY
AMBIONSE
Title:
AMBIONSE FOOTINGS
SLOPED/STEPPED FOOTINGS
Cad ref N°: FTG-SF
These details are intended to assist the user in the construction of Ambionse insulated concrete formwork structures
Drawn: C COTTLE
Scale: 1:20 @A4
Date: MAY 2005

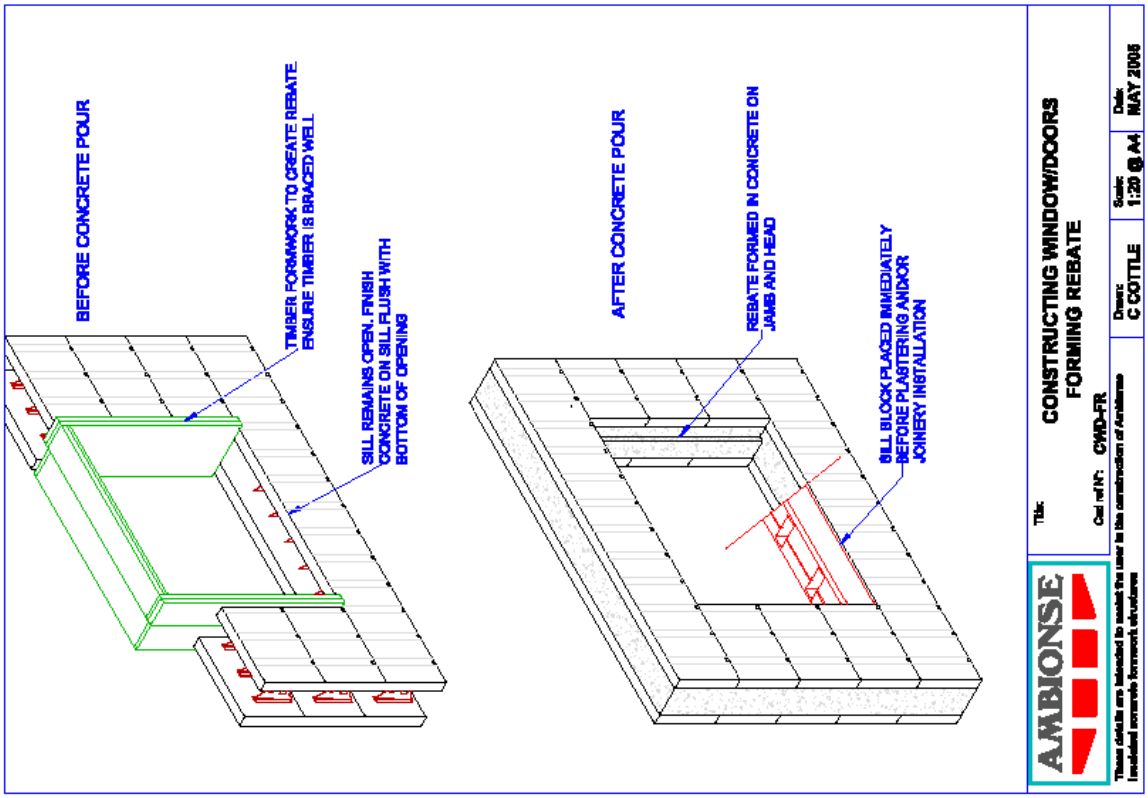

TIMBER FRAME WITH BRICK VENEER AS SPECIFIED
SLAB AS SPECIFIED
REBATE AS SPECIFIED
REINFORCING AS SPECIFIED
250 SERIES AMBIONSE
TEMPORARY TIMBER SCREED EDGE ATTACHED TO AMBIONSE FIXING STRIPS
FFL ABOVE FGL AS SPECIFIED
FGL
TAPER CUT ON TOP BLOCK
WATERPROOFING TO FOOTING AS SPECIFIED
FOOTING DIMENSIONS AND REINFORCING AS SPECIFIED
NOTE: TEMPORARY BRACING MAY BE REQUIRED ON FOOTING WALL TO ENSURE CORRECT ALIGNMENT
AMBIONSE
Title:
AMBIONSE FOOTINGS
HEADER BLOCK WITH BRICK VENEER
Cad ref N°: FTG-HB
These details are intended to assist the user in the construction of Ambionse insulated concrete formwork structures
Drawn: C COTTLE
Scale: 1:10 @ A4
Date: NOV 2005

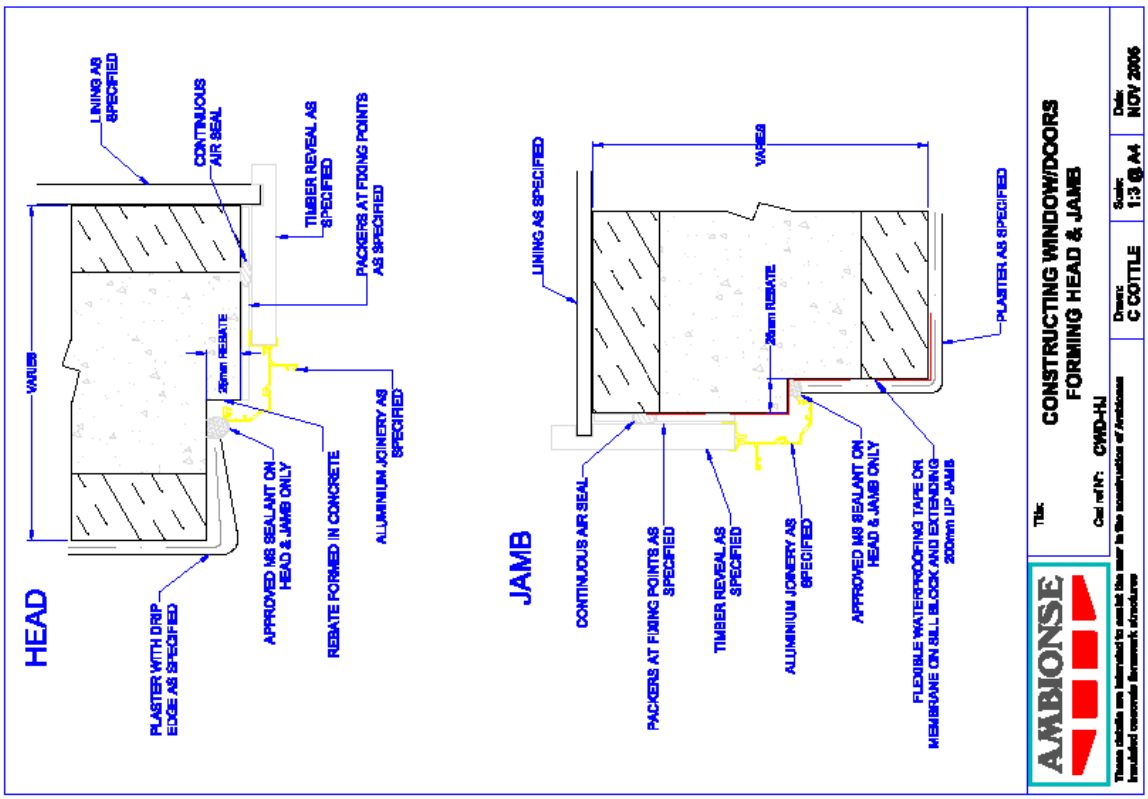

INTERNAL LINING AS SPECIFIED
MAINTAIN HEIGHT OF BRIDGE FOR STRENGTH DURING CONCRETE POUR
FLOOR COVERING AS SPECIFIED
SUSPENDED CONCRETE FLOOR AND TOPPING AS SPECIFIED
CEILING AND FIXING AS SPECIFIED
INTERNAL LINING AS SPECIFIED
250 SERIES AMBIONSE
REINFORCEMENT AS SPECIFIED
TEMPORARY TIMBER BRACING
LEVEL OF FIRST CONCRETE POUR
SEATING LENGTH AS SPECIFIED
AMBIONSE
Title: CONNECTION TO STRUCTURES
CONCRETE MID-FLOOR
Cad ref'n: GT8-CF
Drawn: C COTTLE
Scale: 1:10 @ A4
Date: MAY 2006

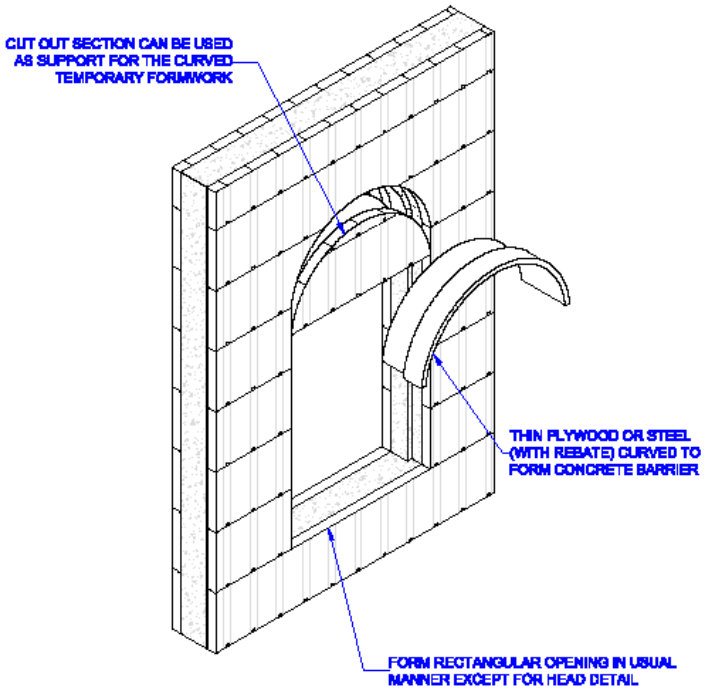

INTERSECTING AMBIONSE WALLS
ADDITIONAL BRACING REQUIRED ACROSS JUNCTION
SEAL JOINT ON BOTH SIDES
REINFORCING AS SPECIFIED
BRIDGE LEFT IN PLACE
CABLE/ZIP TIE CONNECTING BRIDGES
TIMBER OPTION 1
REINFORCING AS SPECIFIED
TREATED TIMBER PACKERS PLACED AFTER CONCRETE POUR
WALL FRAMING AS SPECIFIED
DPC
FIXING AS SPECIFIED
TIMBER OPTION 2
REINFORCING AS SPECIFIED
DPC
WALL FRAMING AS SPECIFIED
FIXING AS SPECIFIED PLACED BEFORE CONCRETE POUR
AMBIONSE
Title: CONNECTION TO STRUCTURES
INTERSECTING WALLS
Cad ref'n: GT8-IW
Drawn: C COTTLE
Scale: 1:10 @ A4
Date: MAY 2006


INTERNAL LINING AS SPECIFIED
STRINGER OR RIBBON PLATE ATTACHED TO WALL AS SPECIFIED
FLOOR COVERING AS SPECIFIED
CEILING AS SPECIFIED
ENGINEERED TIMBER FLOOR AS SPECIFIED
JOIST HANGER AS SPECIFIED
INTERNAL LINING AS SPECIFIED
250 SERIES AMBIONSE
REINFORCEMENT AS SPECIFIED
CUT BEVELLED OPENING FOR FIXING LOCATIONS
160
100
TYPICAL CUTOUT SECTION
AMBIONSE
Title: CONNECTION TO STRUCTURES
TIMBER MID-FLOOR
Cad ref N°: CT8-TF
Drawn: C COTTLE
Scale: 1:10 @ A4
Date: MAY 2003


INSULATION AS SPECIFIED
CEILING AS SPECIFIED
TOP PLATE WITH OVERHANG FOR CEILING FIXING
FIXING TO CONCRETE AS SPECIFIED
DPC
INTERNAL LINING AS SPECIFIED
250 SERIES AMBIONSE
ROOFING AS SPECIFIED
DPC
TONGUE REMOVED FROM TOP OF BLOCK
STRINGER/RIBBON PLATE ATTACHED TO PACKER BLOCKS
PACKER BLOCKS @ 1200mm CRS WITH FIXING AS SPECIFIED
REINFORCEMENT AS SPECIFIED
AMBIONSE
Title: CONNECTION TO STRUCTURES
TIMBER TRUSS
Cad ref N°: CT9-TT
Drawn: C COTTLE
Scale: 1:10 @ A4
Date: NOV 2005


BEFORE CONCRETE POUR
TIMBER FORMWORK TO CREATE REBATE ENSURE TIMBER IS BRACED WELL
SILL REMAINS OPEN, FINISH CONCRETE ON SILL FLUSH WITH BOTTOM OF OPENING
AFTER CONCRETE POUR
REBATE FORMED IN CONCRETE ON JAMB AND HEAD
SILL BLOCK PLACED IMMEDIATELY BEFORE PLASTERING AND/OR JOINERY INSTALLATION
AMBIONSE
Title: CONSTRUCTING WINDOW/DOORS FORMING REBATE
Cad ref N°: CWD-FR
Drawn: C COTTLE
Scale: 1:20 @ A4
Date: MAY 2006


HEAD
LINING AS SPECIFIED
CONTINUOUS AIR SEAL
TIMBER REVEAL AS SPECIFIED
PACKERS AT FIXING POINTS AS SPECIFIED
VARIES
25mm REBATE
PLASTER WITH DRIP EDGE AS SPECIFIED
APPROVED M8 SEALANT ON HEAD & JAMB ONLY
REBATE FORMED IN CONCRETE
ALUMINIUM JOINERY AS SPECIFIED
JAMB
LINING AS SPECIFIED
VARIES
25mm REBATE
PLASTER AS SPECIFIED
CONTINUOUS AIR SEAL
PACKERS AT FIXING POINTS AS SPECIFIED
TIMBER REVEAL AS SPECIFIED
ALUMINIUM JOINERY AS SPECIFIED
APPROVED M8 SEALANT ON HEAD & JAMB ONLY
FLEXIBLE WATERPROOFING TAPE OR MEMBRANE ON SILL BLOCK AND EXTENDING 200mm UP JAMB
AMBIONSE
Title: CONSTRUCTING WINDOW/DOORS FORMING HEAD & JAMB
Cad ref N°: CWD-HJ
Drawn: C COTTLE
Scale: 1:3 @ A4
Date: NOV 2006



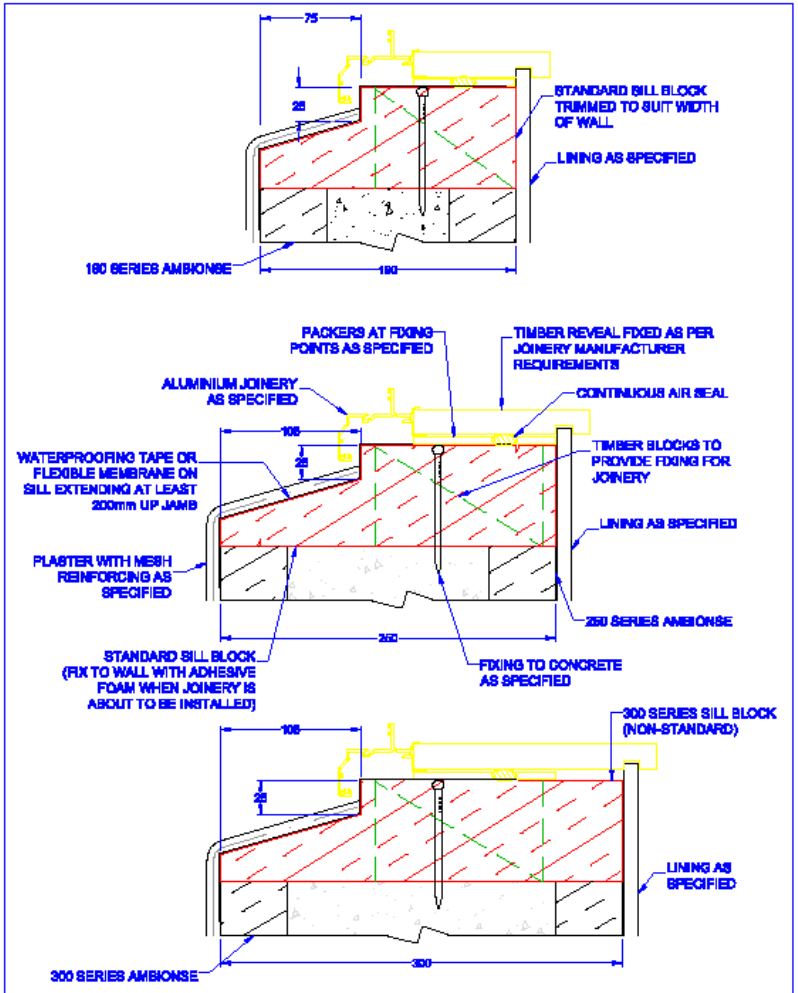
AMBIONSE

Title: **CONSTRUCTING WINDOW/DOORS ARCHED OPENINGS**

Cad ref N°: CWD-AC

These details are intended to assist the user in the construction of Ambionse insulated concrete formwork structures

Drawn:	Scale:	Date:
C COTTLE	1:20 @ A4	NOV 2005



Note: ADDITIONAL PROPRIETARY FLASHINGS MAY BE REQUIRED - CONFIRM WITH JOINERY MANUFACTURER

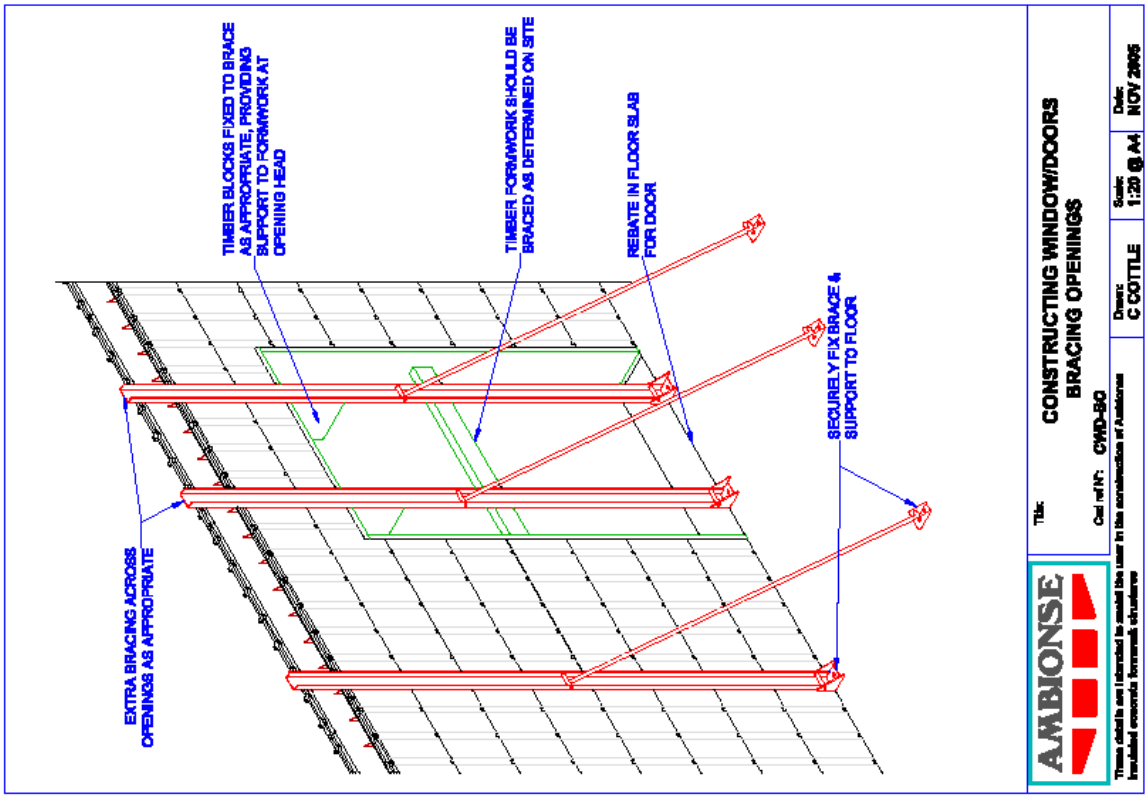
AMBIONSE

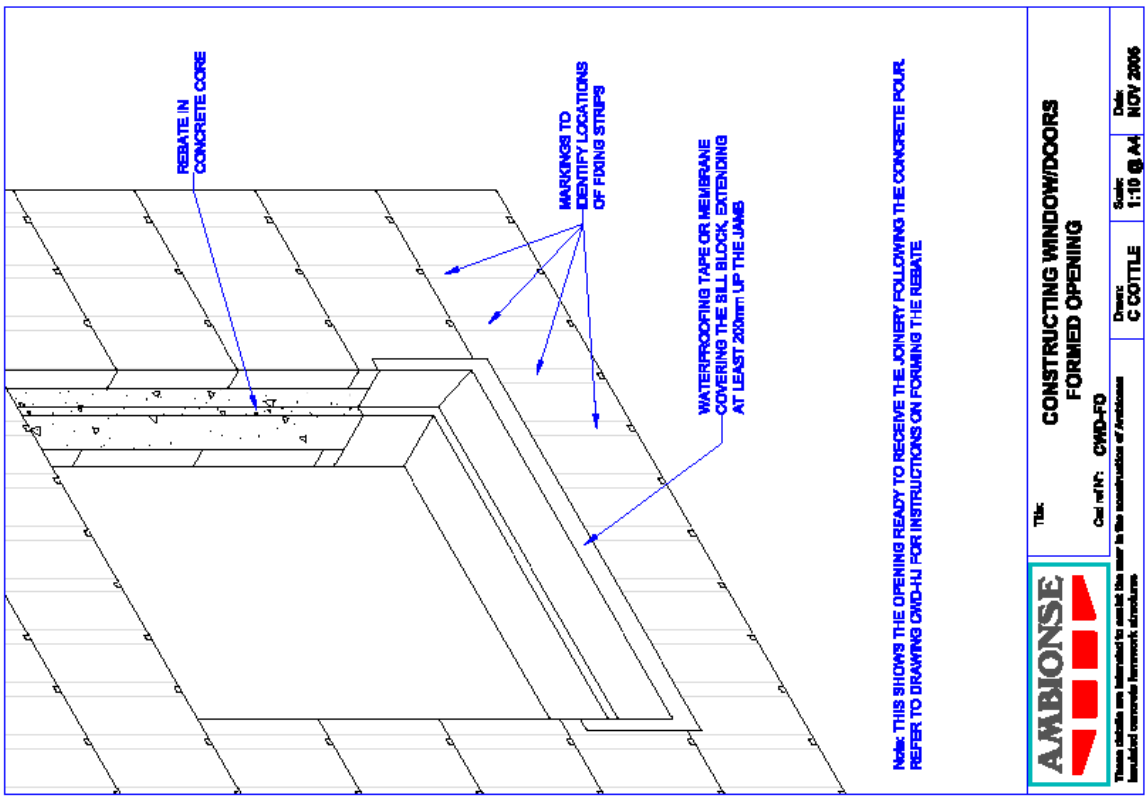
Title: **CONSTRUCTING WINDOW/DOORS SILL BLOCK DETAILS**

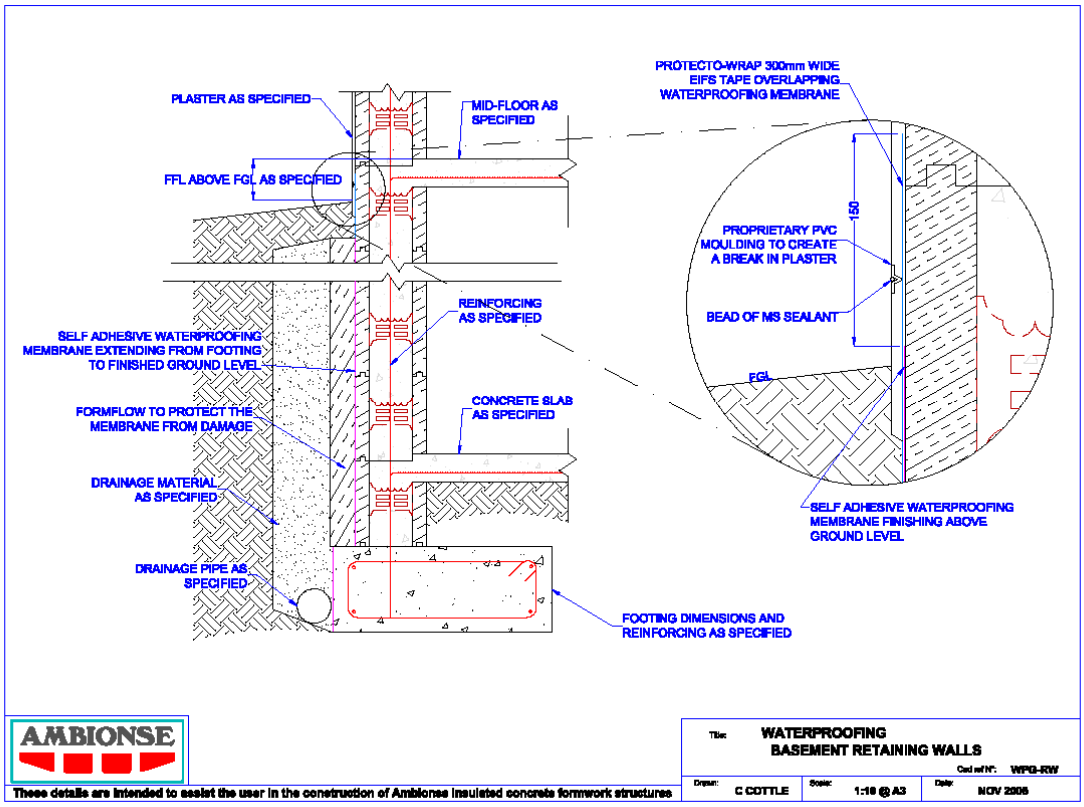
Cad ref N°: CWD-SB

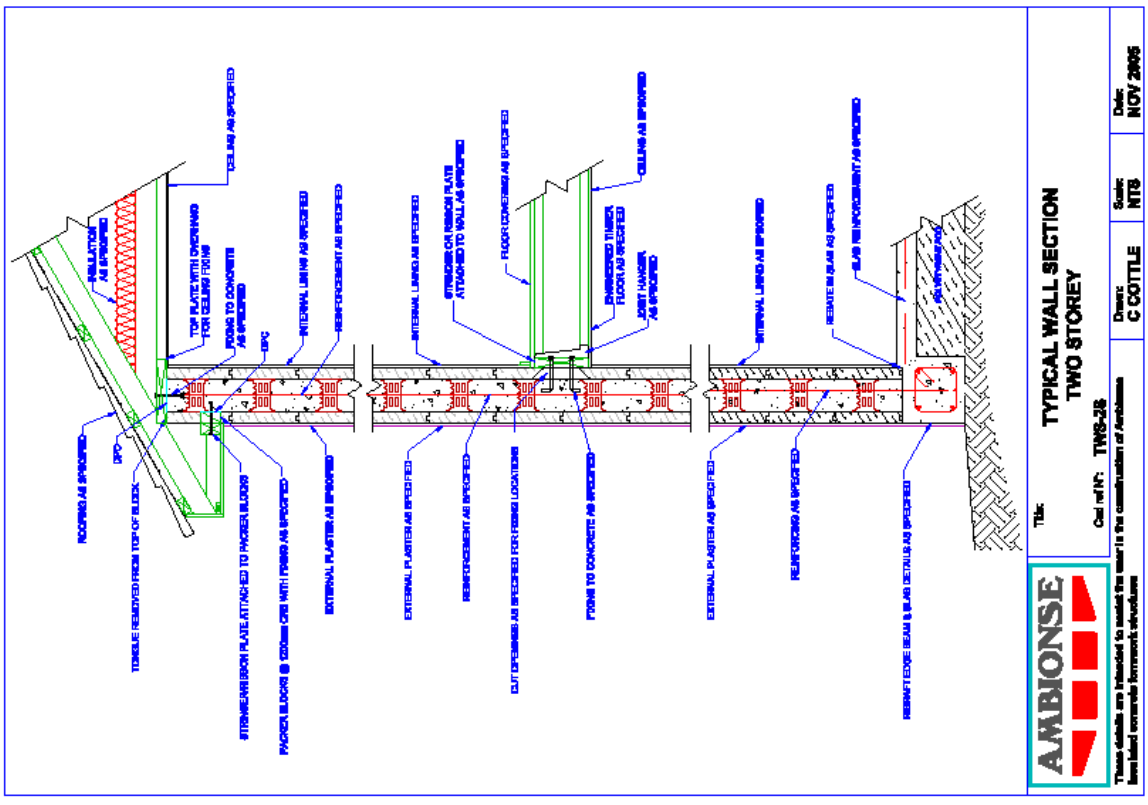
These details are intended to assist the user in the construction of Ambionse insulated concrete formwork structures

Drawn:	Scale:	Date:
C COTTLE	1:3 @ A4	NOV 2005

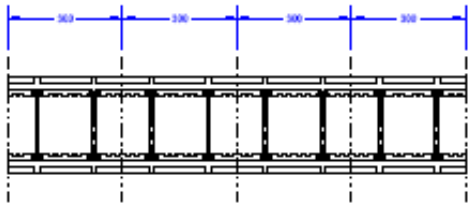

TIMBER BLOCKS FIXED TO BRACE AS APPROPRIATE, PROVIDING SUPPORT TO FORMWORK AT OPENING HEAD
TIMBER FORMWORK SHOULD BE BRACED AS DETERMINED ON SITE
REBATE IN FLOOR SLAB FOR DOOR
SECURELY FIX BRACE & SUPPORT TO FLOOR
EXTRA BRACING ACROSS OPENINGS AS APPROPRIATE
AMBIONSE
Title: CONSTRUCTING WINDOW/DOORS
BRACING OPENINGS
Cad ref N°: CWD-BO
Drawn: C COTTLE
Scale: 1:20 @ A4
Date: NOV 2005
These details are intended to assist the user in the construction of Ambionse Insulated concrete formwork structures


REBATE IN CONCRETE CORE
MARKINGS TO IDENTIFY LOCATIONS OF FIXING STRIPS
WATERPROOFING TAPE OR MEMBRANE COVERING THE SILL BLOCK, EXTENDING AT LEAST 200mm UP THE JAMB
Note: THIS SHOWS THE OPENING READY TO RECEIVE THE JOINERY FOLLOWING THE CONCRETE POUR. REFER TO DRAWING CWD-HJ FOR INSTRUCTIONS ON FORMING THE REBATE
AMBIONSE
Title: CONSTRUCTING WINDOW/DOORS
FORMED OPENING
Cad ref N°: CWD-FO
Drawn: C COTTLE
Scale: 1:10 @ A4
Date: NOV 2005
These details are intended to assist the user in the construction of Ambionse Insulated concrete formwork structures

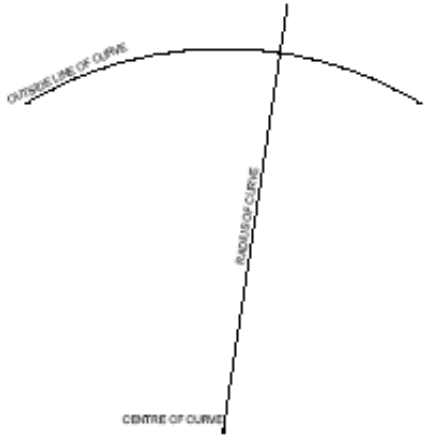

PLASTER AS SPECIFIED
MID-FLOOR AS SPECIFIED
FFL ABOVE FGL AS SPECIFIED
PROTECTO-WRAP 300mm WIDE EIFS TAPE OVERLAPPING WATERPROOFING MEMBRANE
PROPRIETARY PVC MOULDING TO CREATE A BREAK IN PLASTER
150
BEAD OF MS SEALANT
FGL
REINFORCING AS SPECIFIED
SELF ADHESIVE WATERPROOFING MEMBRANE EXTENDING FROM FOOTING TO FINISHED GROUND LEVEL
CONCRETE SLAB AS SPECIFIED
FORMFLOW TO PROTECT THE MEMBRANE FROM DAMAGE
DRAINAGE MATERIAL AS SPECIFIED
SELF ADHESIVE WATERPROOFING MEMBRANE FINISHING ABOVE GROUND LEVEL
DRAINAGE PIPE AS SPECIFIED
FOOTING DIMENSIONS AND REINFORCING AS SPECIFIED
AMBIONSE
Title: WATERPROOFING BASEMENT RETAINING WALLS
Cad ref N°: WPG-RW
Drawn: C COTTLE
Scale: 1:10 @ A3
Date: NOV 2005
These details are intended to assist the user in the construction of Ambionse insulated concrete formwork structures


TYPICAL WALL SECTION TWO STOREY
Cad ref N°: TW6-2S
Drawn: C COTTLE
Scale: NTS
Date: NOV 2005
AMBIONSE

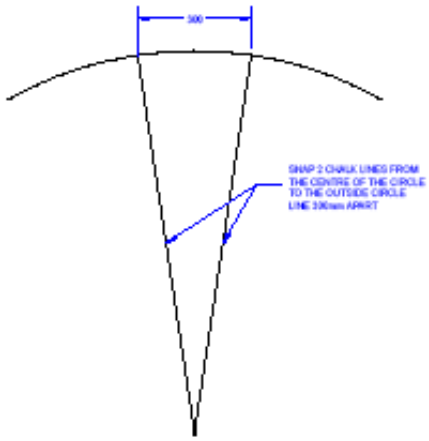
STEP 1 Cut the straight blocks into 300mm sections, keeping the bridges centred in the sections



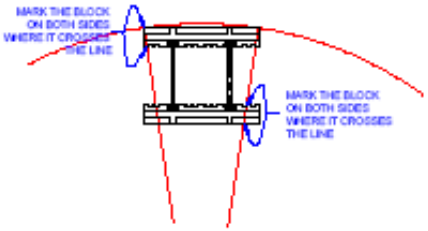
STEP 2 Mark the outside of the radius on the footing or slab and snap a chalk line extending beyond the mark for the outside radius



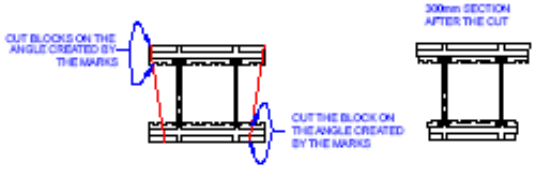
STEP 3 From the intersection of the two lines, measure 300mm and snap a chalk line to this point from the centre of the circle.



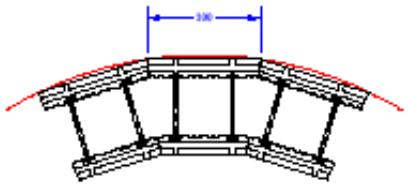
STEP 4 Place one of the 300mm sections on the outside curve line, making sure the outside corners of the block are at the locations of the chalk lines with the curve line



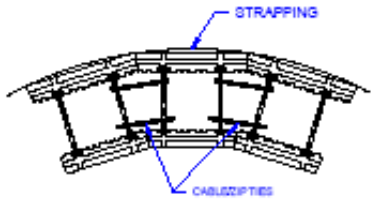
STEP 5 Cut the blocks on the marks, following the angle created by the marks.



STEP 6 Repeat Steps 4 & 5 until the proper number of blocks have been cut to form the curve.



STEP 7 Use cable/zip ties to secure the blocks together. Additional reinforcing such as flexible plywood, or strapping should be used to prevent the blocks opening up during the concrete pour



CAD DRAWINGS