

**VALENTIN ENGINEERING LTD.**  
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REVIEWED	
REVIEWED AS NOTED	✓
REVISE AND RE-SUBMIT	

This review by GRAZIANI + CORAZZA Architects Inc. is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that GRAZIANI + CORAZZA Architects Inc. approves the detail design inherent in the shop drawings, responsibility for which shall remain with the Contractor submitting same, and such review shall not relieve the Contractor of his responsibility for errors or omissions in the shop drawings or of his responsibility for meeting all requirements of the contract documents. The Contractor is responsible for dimensions to be confirmed and correlated at job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for co-ordination of the work of all subtrades.  
 GRAZIANI + CORAZZA Architects Inc.  
 By: Fernando Croatto Date: Nov. 26, 2021

Mohammed Abed Nov. 26 2021

**STRUCTURAL DESIGN  
 FOR STRUCTURAL LIGHT-GAUGE STEEL FRAMING  
 (EXCLUDING ROOF FRAMING)**

CLIENT: TORINO DRYWALL INC.  
 PROJECT: ROYAL PINE HOMES – BUILDINGS A, B, C AND D  
 ATTMAR & PALLESCHI DRIVE  
 BRAMPTON, ONTARIO  
 DATE: NOVEMBER 20, 2021

DRAWING REVIEW	
<small>This review of this drawing does not in any way relieve the contractor of responsibility for its accuracy or for compliance with the contract documents.</small>	
No comment	✓ See comment
Amend & Resubmit	Rejected See Remarks
Submission No. _____	
Project No. <u>19066</u>	
By <u>KD</u>	
Date <u>26 Nov 2021</u>	
JABLONSKY, AST AND PARTNERS <small>Consulting Engineers      129 Leslie Street Don Mills, Ont. M3C 2K5</small>	

PREPARED BY:



VALENTIN BRINOVEC, P.ENG.

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LOCATION: ATTMAR & PALLESCHI DRIVE, BRAMPTON, ONTARIO  
DATE: NOVEMBER 20, 2021  
ARCHITECT: GRAZIANI + CORAZZA ARCHITECTS  
DRYWALL CONTRACTOR: TORINO DRYWALL INC.  
STRUCTURAL STUD ENGINEER: VALENTIN ENGINEERING LTD.



## **NOTES**

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CHANNEL BRIDGING DETAIL FOR 152mm (6") STRUCTURAL STUD FRAMING

# **DESIGN NOTES FOR LIGHT-GAUGE STRUCTURAL STEEL FRAMING**

PROJECT: ROYAL PINE HOMES – BUILDINGS A, B, C AND D  
LOCATION: ATTMAR & PALLESCHI DRIVE, BRAMPTON, ONTARIO  
DATE: NOVEMBER 20, 2021  
ARCHITECT: GRAZIANI + CORAZZA ARCHITECTS  
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STRUCTURAL STUD ENGINEER: VALENTIN ENGINEERING LTD.



## **DESIGN CRITERIA**

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- DESIGN BASED ON THE ONTARIO BUILDING CODE 2012 AND CSA S136-01
- DESIGN WIND PRESSURES:
  - GROUND LEVEL: 1.25 kPa (26.0 psf) FOR STRENGTH AT WALLS
  - GROUND LEVEL: 0.94 kPa (19.5 psf) FOR DEFLECTION AT WALLS
  - GROUND LEVEL: 1.54 kPa (32.2 psf) FOR STRENGTH AT CORNERS
  - GROUND LEVEL: 1.16 kPa (24.2 psf) FOR DEFLECTION AT CORNERS
  - TOP LEVEL: 1.46 kPa (30.4 psf) FOR STRENGTH AT WALLS
  - TOP LEVEL: 1.09 kPa (22.8 psf) FOR DEFLECTION AT WALLS
  - TOP LEVEL: 1.80 kPa (37.6 psf) FOR STRENGTH AT CORNERS
  - TOP LEVEL: 1.35 kPa (28.2 psf) FOR DEFLECTION AT CORNERS
- GUARD LOADS AS PER 2012 OBC SECTION 4.1.5.14 AND 4.1.5.16
- EXTERIOR FRAMING DEFLECTION LIMIT: L/360 FOR ALL CLADDING TYPES
- INTERIOR GUARD WALL DEFLECTION LIMIT: L/240
- THE STRUCTURAL STUD DESIGN IS BASED ON ARCHITECTURAL DRAWINGS BY GRAZIANI + CORAZZA ARCHITECTS DATED NOVEMBER 5, 2021.  
NO ARCHITECTURAL SPECIFICATIONS WERE PROVIDED.  
NO STRUCTURAL DRAWINGS WERE PROVIDED.

# **DESIGN NOTES FOR LIGHT-GAUGE STRUCTURAL STEEL FRAMING**

PROJECT: ROYAL PINE HOMES – BUILDINGS A, B, C AND D  
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## **FRAMING**

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- ALL MATERIALS TO BE GALVANIZED SHEET STEEL CONFORMING TO ASTM A653 G60 (Z180) MINIMUM.
- YIELD STRENGTH: 230 Mpa (33350 psi) FOR 43 MIL (0.0451) OR LIGHTER MATERIAL AND 345 Mpa (50000 psi) FOR 54 MIL (0.0566) OR HEAVIER MATERIAL
- TENSILE STRENGTH 310 Mpa (45000 psi) FOR 43 MIL (0.0451) OR LIGHTER MATERIAL AND 450 Mpa (65000 psi) FOR 54 MIL (0.0566) OR HEAVIER MATERIAL
- ALL LIGHT-GAUGE STEEL MUST BE PROTECTED FROM THE ENVIRONMENT. NO LIGHT-GAUGE STEEL MUST BE LEFT EXPOSED TO MOISTURE.
- SEE SECTIONS AND DETAILS FOR ALL MATERIAL THICKNESS, WIDTHS AND SPACING.
- ALL STUDS ARE TO BE BRACED BY ROWS OF CONTINUOUS 38mm x 13mm x 43 MIL (1 1/2" x 1/2" x 0.0451") BRIDGING CHANNEL.
- ALL STUDS ARE TO HAVE 41mm (1 5/8") FLANGES UNLESS OTHERWISE SPECIFIED.
- ALL TOP TRACKS, THAT REQUIRE VERTICAL DEFLECTION, ARE TO BE SLOTTED TO ALLOW FOR A MINIMUM 19mm (3/4") VERTICAL DEFLECTION UNLESS SPECIFIED OTHERWISE IN THE SHOP DRAWINGS.
- LATERALLY LOADED STUDS ARE TO HAVE NO MORE THAN 6mm (1/4") GAP BETWEEN THE TRACK AND THE END OF THE STUD.
- AXIALLY LOADED STUDS TO BE TIGHT INSIDE THE TRACKS. NO GAPS BETWEEN END OF STUD AND TRACK.
- INSTALL ALL FRAMING LEVEL AND PLUMB.
- ALL MATERIALS TO BE UNDAMAGED AND IN GOOD WORKING CONDITION.
- MATERIALS TO BE AS PRODUCED BY BAILEY METAL PRODUCTS OR EQUIVALENT.

# **DESIGN NOTES FOR LIGHT-GAUGE STRUCTURAL STEEL FRAMING**

PROJECT: ROYAL PINE HOMES – BUILDINGS A, B, C AND D  
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ARCHITECT: GRAZIANI + CORAZZA ARCHITECTS  
DRYWALL CONTRACTOR: TORINO DRYWALL INC.  
STRUCTURAL STUD ENGINEER: VALENTIN ENGINEERING LTD.



## **FASTENERS**

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- ALL FRAMING SCREWS TO BE RUST RESISTANT, HIGH STRENGTH STEEL.
- SCREWS FROM TRACK TO STUD OR STUD TO STUD SHALL BE #10 – 16
- ALL STUDS TO BE FASTENED TO TRACKS ON BOTH SIDES.
- ALL BUILT UP MEMBERS ARE TO BE CONNECTED TOGETHER WITH #10-16 SCREWS SPACED AT 457mm (18") O.C. ALONG THE ENTIRE LENGTH.
- FOR 92mm (3 5/8") STRUCTURAL STUD FRAMING, THE CHANNEL BRIDGING IS TO BE FASTENED TO EVERY STUD USING A 38mm x 38mm x 54 MIL x 83mm (1 1/2"x 1 1/2"x 0.0566"x 3 1/4") STEEL ANGLE. SECURE EACH ANGLE TO THE STUD USING TWO #10-16 SCREWS AND TO THE CHANNEL USING TWO #10-16 SCREWS.
- FOR 152mm (6") STRUCTURAL STUD FRAMING, THE CHANNEL BRIDGING IS TO BE FASTENED TO EVERY STUD USING A 38mm x 38mm x 54 MIL x 140mm (1 1/2"x 1 1/2"x 0.0566"x 5 1/2") STEEL ANGLE. SECURE EACH ANGLE TO THE STUD USING TWO #10-16 SCREWS AND TO THE CHANNEL USING TWO #10-16 SCREWS.
- TRACKS AND ANGLE ANCHORS ARE TO BE SECURED TO THE CONCRETE USING 6mm x 44mm (1/4"x 1 3/4") ITW TAPCON SCREWS OR HILTI KWIKCON SCREWS. ALL TAPCON SCREWS MUST HAVE A MINIMUM OF 38mm (1 1/2") EMBEDMENT INTO SOLID CONCRETE UNLESS DEEPER EMBEDMENT IS SPECIFIED IN THE SHOP DRAWINGS. ALL TAPCON SCREWS MUST BE A MINIMUM OF 38mm (1 1/2") AWAY FROM ANY CONCRETE EDGE. SEE THE DRAWINGS FOR NUMBER AND SPACING OF FASTENERS. FOR CONCRETE BLOCK APPLICATIONS, ALL TAPCON SCREWS MUST HAVE A MINIMUM OF 44mm (1 3/4") CONCRETE EMBEDMENT.
- TRACKS AND ANGLE ANCHORS ARE TO BE SECURED TO THE STRUCTURAL STEEL USING HILTI 'X-U' POWDER ACTUATED FASTENERS. WHERE #12-14 SCREWS ARE INDICATED ON THE SHOP DRAWING DETAILS, POWDER ACTUATED FASTENERS ARE NOT TO BE USED. SEE THE DRAWINGS FOR NUMBER AND SPACING OF FASTENERS.
- ALL SCREWS MUST HAVE A MINIMUM OF THREE THREADS PASSING THROUGH THE FASTENED MATERIAL.

# **DESIGN NOTES FOR LIGHT-GAUGE STRUCTURAL STEEL FRAMING**

**PROJECT: ROYAL PINE HOMES – BUILDINGS A, B, C AND D**  
**LOCATION: ATTMAR & PALLESCHI DRIVE, BRAMPTON, ONTARIO**  
**DATE: NOVEMBER 20, 2021**  
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**STRUCTURAL STUD ENGINEER: VALENTIN ENGINEERING LTD.**



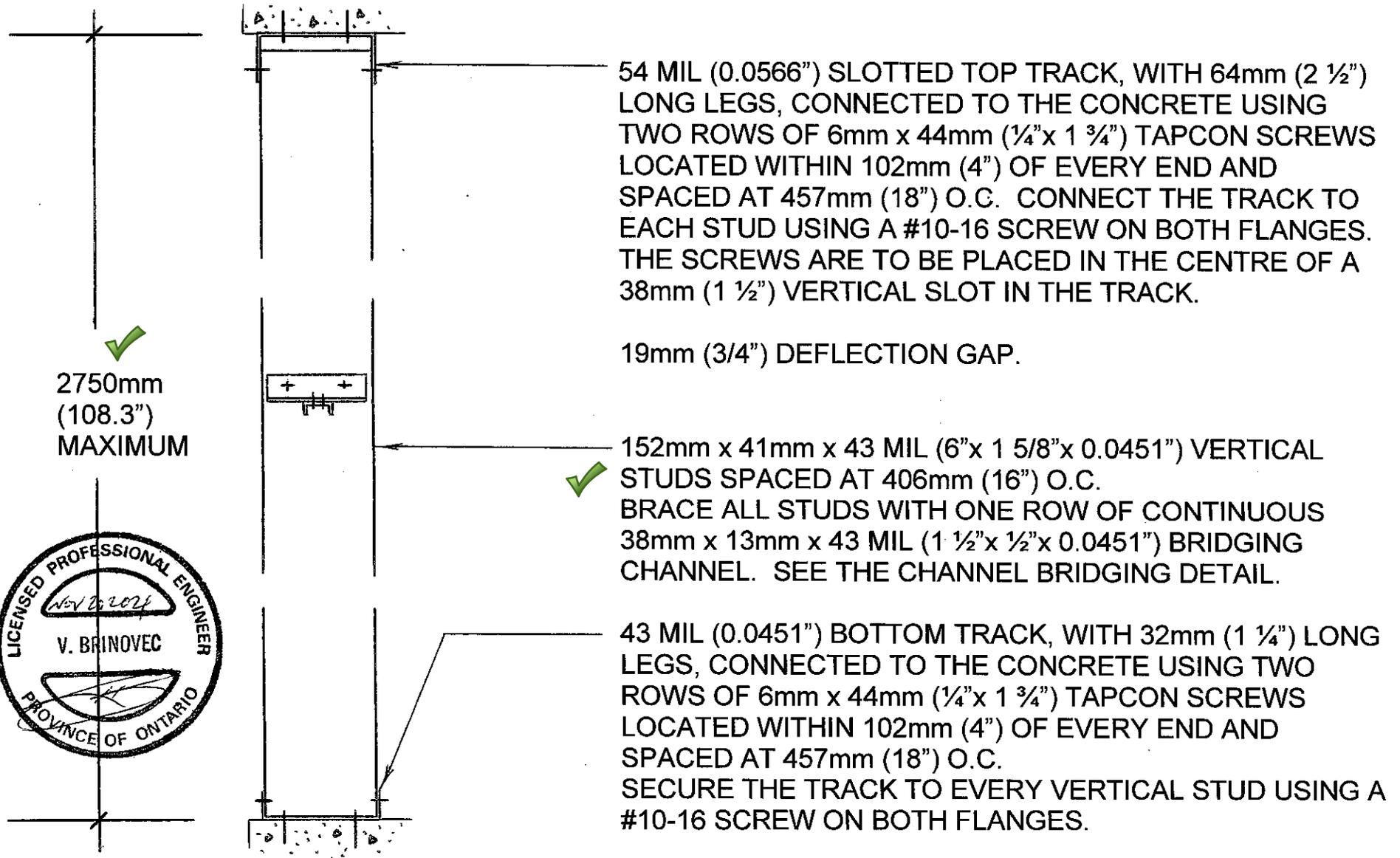
## **NOTES**

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- **REPORT ALL DISCREPENCIES TO THE CONSULTANT.**
- **DO NOT SCALE DRAWINGS.**
- **ALL DIMENSIONS ON STRUCTURAL DRAWINGS ARE APPROXIMATE ONLY. ALL DIMENSIONS ARE TO BE OBTAINED FROM ARCHITECTURAL DRAWINGS AND RELEVANT SHOP DRAWINGS.**
- **ALL LIGHT-GAUGE STEEL BE MUST BE PROTECTED FROM THE ENVIROMENT. NO LIGHT-GAUGE STEEL MUST BE LEFT EXPOSED TO MOISTURE.**
- **NO MASONRY DEAD LOADS ARE TO BE APPLIED TO THE LIGHT-GAUGE STEEL FRAMING.**
- **NO CHANGES ARE TO BE MADE TO THE STRUCTURAL STUD DRAWINGS WITHOUT THE WRITTEN APPROVAL OF VALENTIN ENGINEERING LTD.**
- **STRUCTURAL STUD FRAMING IS TO BE INSPECTED PRIOR TO BOARDING. ENSURE SITE INSPECTIONS ARE CONDUCTED BY QUALIFIED PERSONEL. IF VALENTIN ENGINEERING IS TO BE CONTRACTED TO DO THE SITE INSPECTION, PROVIDE ONE WEEKS NOTICE TO ALLOW FOR SCHEDULING.**
- **THESE DRAWINGS ARE INTENDED FOR USE ON THIS PROJECT ONLY. THEY ARE NOT TO BE TRANSFERRED IN WHOLE OR IN PART TO ANY OTHER PROJECT.**
- **THESE DRAWINGS ARE TO BE USED FOR THE STRUCTURAL DESIGN OF LIGHT GAUGE STEEL FRAMING ONLY.**
- **IT IS THE ARCHITECT'S AND PROJECT STRUCTURAL ENGINEER'S RESPONSIBILITY TO ENSURE ADEQUATE STRUCTURAL STUPPORT IS PROVIDED FOR THE LIGHT-GAUGE FRAMING.**
- **THE BRICK CONNECTOR DESIGN IS BY OTHERS.**

# ATTMAR & PALLESCHI DRIVE, BRAMPTON

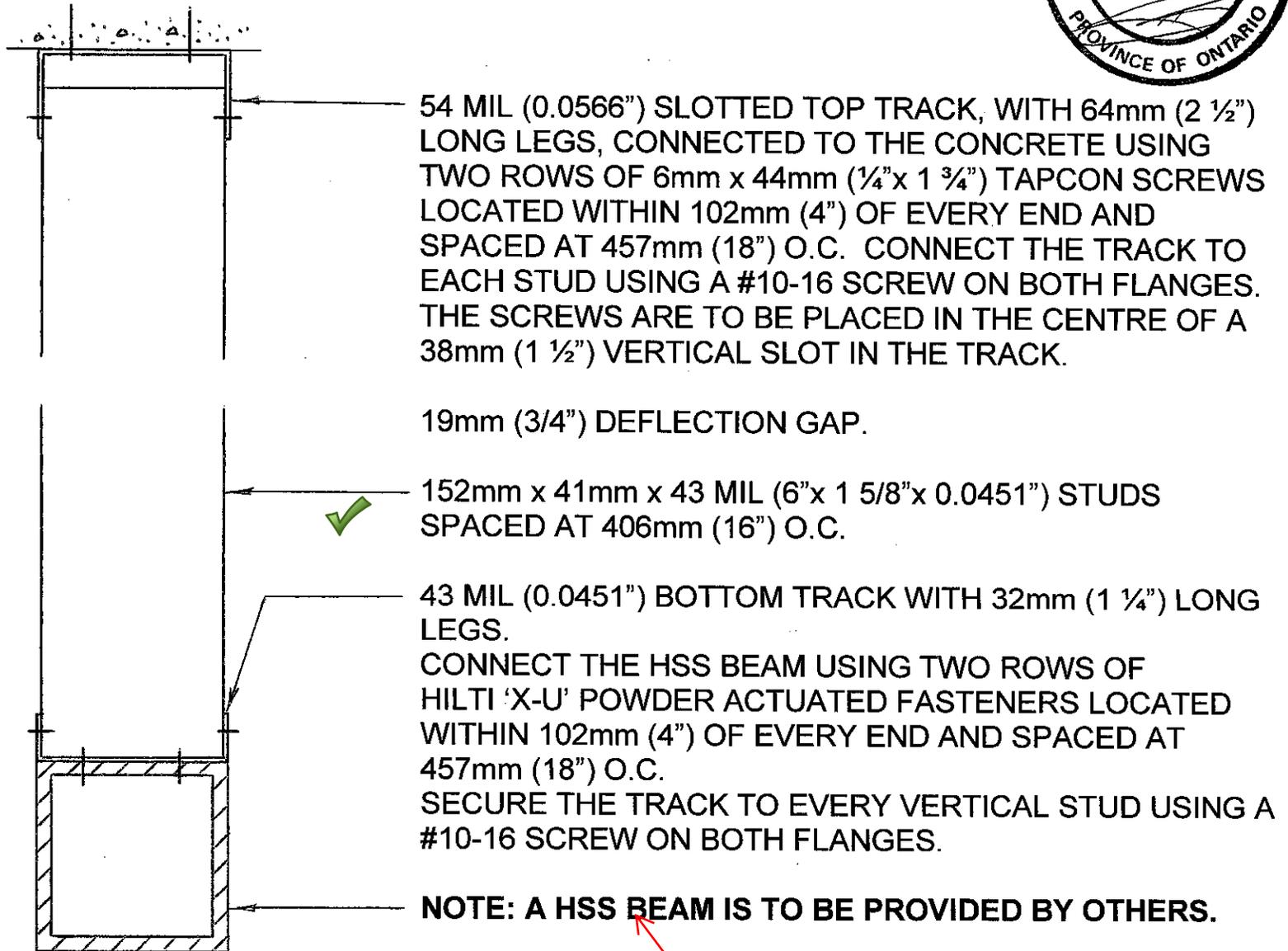
WALL SECTION 'W1' – FOR EXTERIOR WALLS ON ALL FLOORS ON BUILDINGS A, B, C AND D  
ARCH. REF. 2/A601 & 4/A602 & 1/A603 & 3,4/A604 & 4,15/A650



# ATTMAR & PALLESCHI DRIVE, BRAMPTON

HEAD SECTION 'H1' - FOR OVERHEAD GARAGE DOOR

ARCH. REF. 2/A502 & 4/A601 & 10/A650



54 MIL (0.0566") SLOTTED TOP TRACK, WITH 64mm (2 1/2") LONG LEGS, CONNECTED TO THE CONCRETE USING TWO ROWS OF 6mm x 44mm (1/4"x 1 3/4") TAPCON SCREWS LOCATED WITHIN 102mm (4") OF EVERY END AND SPACED AT 457mm (18") O.C. CONNECT THE TRACK TO EACH STUD USING A #10-16 SCREW ON BOTH FLANGES. THE SCREWS ARE TO BE PLACED IN THE CENTRE OF A 38mm (1 1/2") VERTICAL SLOT IN THE TRACK.

19mm (3/4") DEFLECTION GAP.

✓ 152mm x 41mm x 43 MIL (6"x 1 5/8"x 0.0451") STUDS SPACED AT 406mm (16") O.C.

43 MIL (0.0451") BOTTOM TRACK WITH 32mm (1 1/4") LONG LEGS.

CONNECT THE HSS BEAM USING TWO ROWS OF HILTI 'X-U' POWDER ACTUATED FASTENERS LOCATED WITHIN 102mm (4") OF EVERY END AND SPACED AT 457mm (18") O.C.

SECURE THE TRACK TO EVERY VERTICAL STUD USING A #10-16 SCREW ON BOTH FLANGES.

NOTE: A HSS BEAM IS TO BE PROVIDED BY OTHERS.

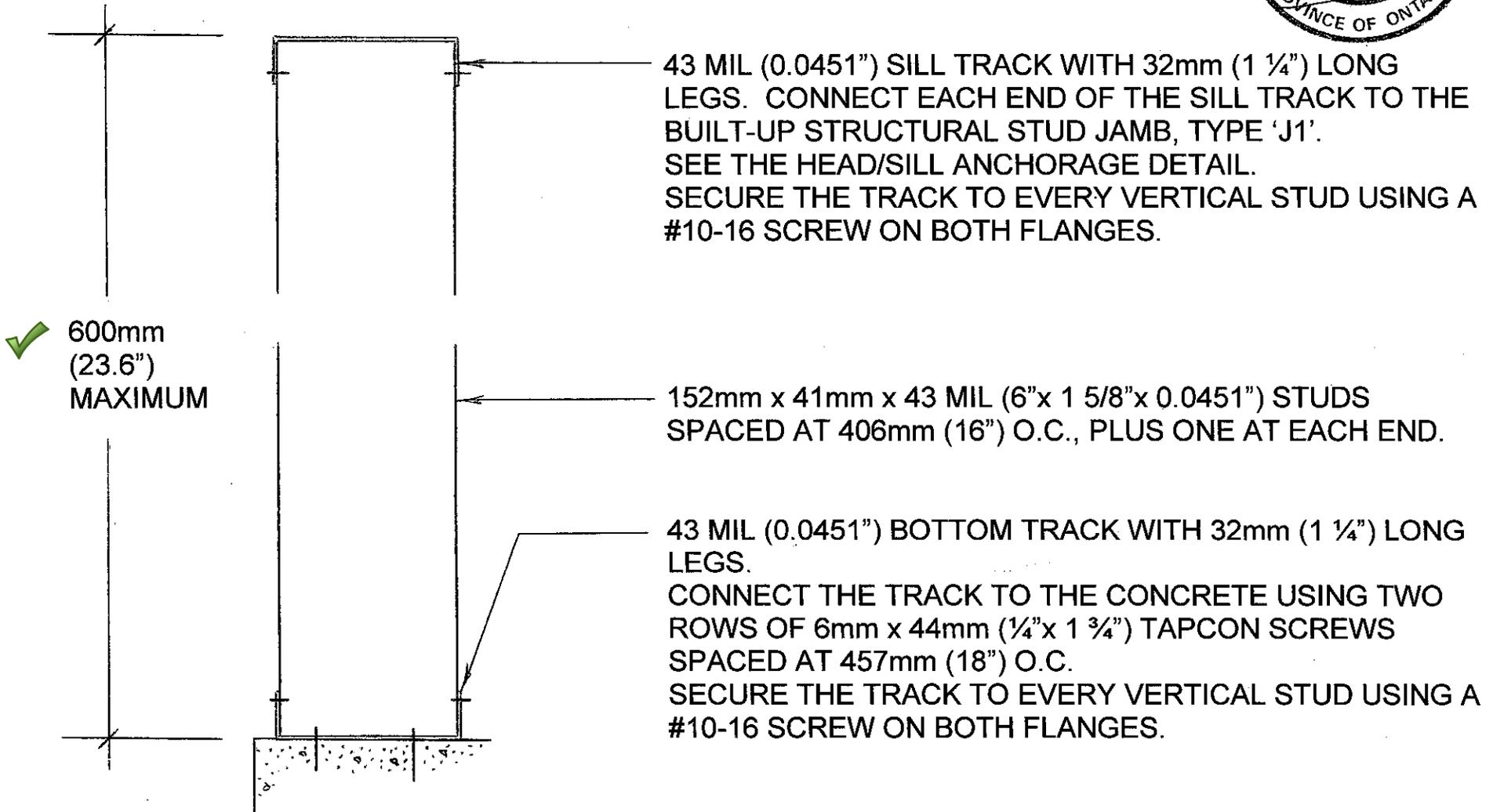
BY MISC METALS

# ATTMAR & PALLESCHI DRIVE, BRAMPTON

SILL SECTION 'S1' – FOR GROUND TO 4<sup>TH</sup> FLOOR WINDOW SILLS

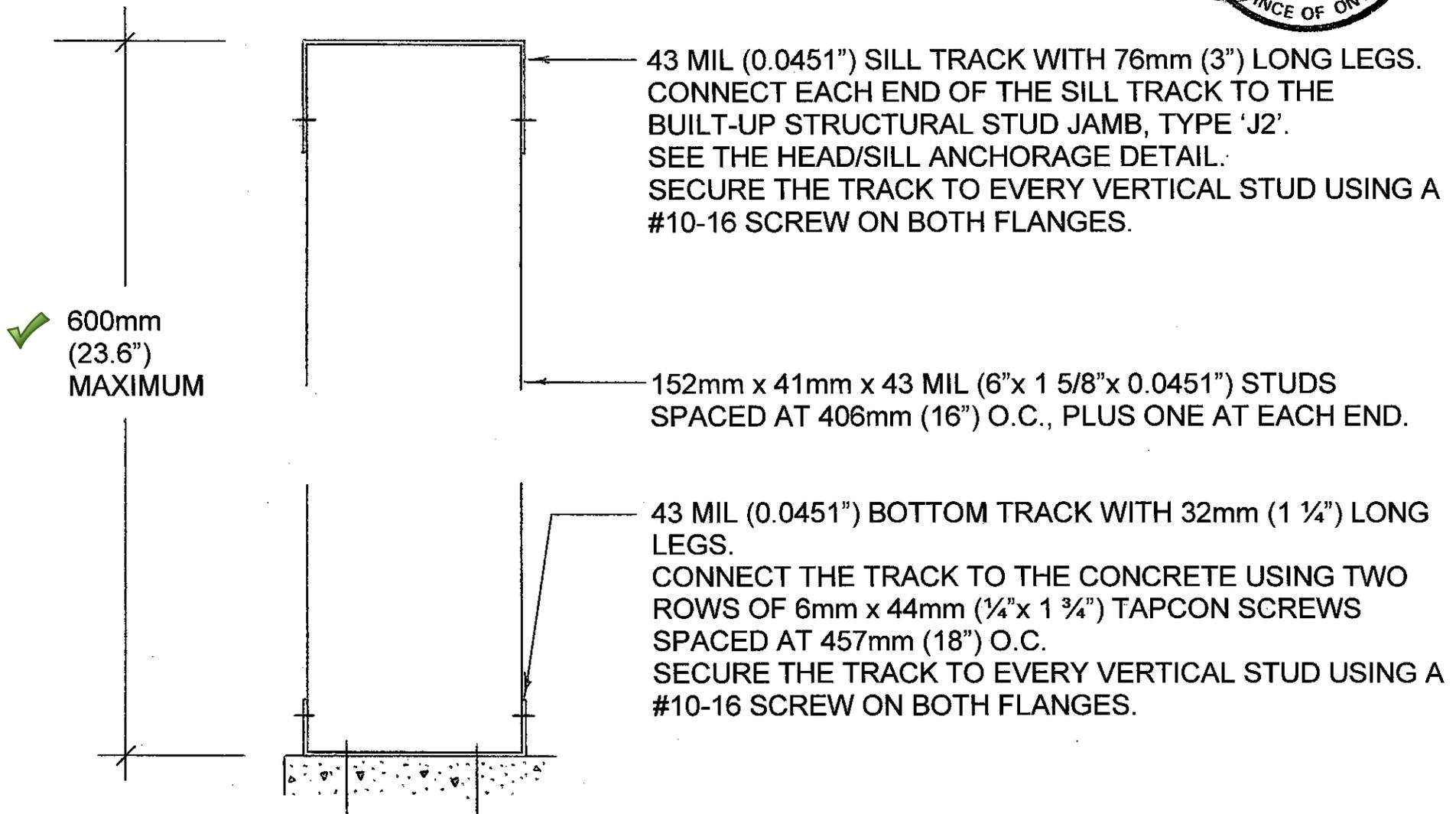
THE MAXIMUM SILL LENGTH IS NOT TO EXCEED 2085mm (82.1")

ARCH. REF. 3/A601 & 2,3/A603 & 4/A650



# ATTMAR & PALLESCI DRIVE, BRAMPTON

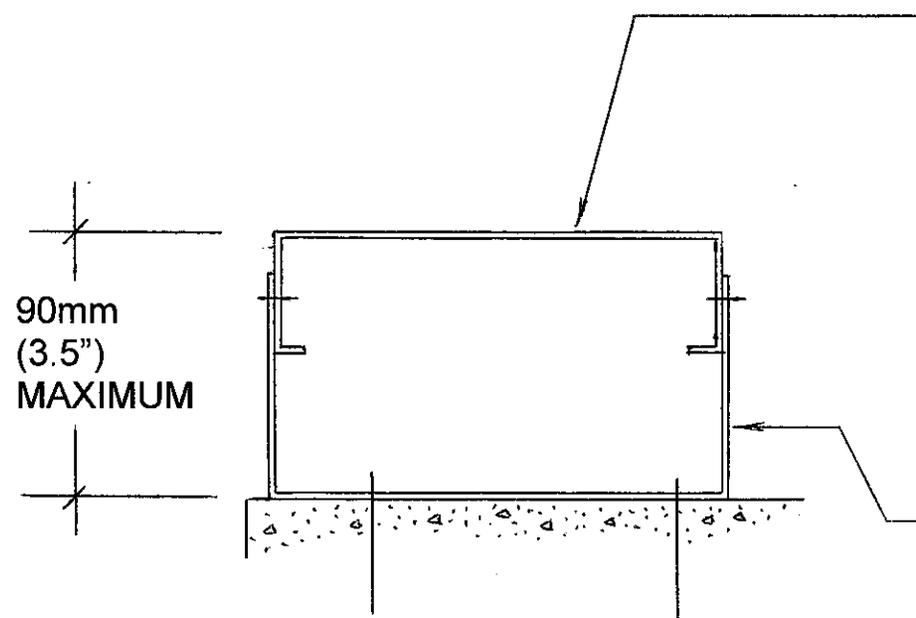
SILL SECTION 'S2' – FOR GROUND TO 4<sup>TH</sup> FLOOR WINDOW SILLS  
THE MAXIMUM SILL LENGTH IS NOT TO EXCEED 3000mm (118.1")  
ARCH. REF. 3/A601 & 2,3/A603 & 4/A650



# ATTMAR & PALLESCHI DRIVE, BRAMPTON

SILL SECTION 'S3' – FOR SMALL 2<sup>ND</sup> FLOOR WINDOW SILLS

ARCH. REF. 3/A602 & 6/A650



CONTINUOUS 152mm x 41mm x 43 MIL (6"x 1 5/8"x 0.0451") HORIZONTAL STUD PLACED INSIDE THE BOTTOM TRACK.

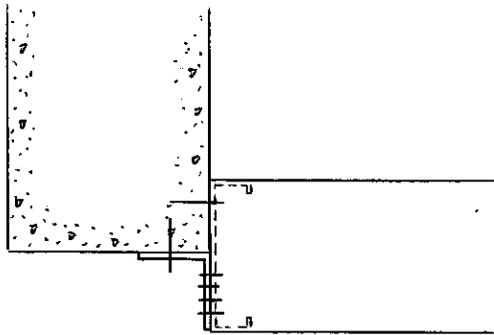
SECURE THE TRACK TO THE HORIZONTAL STUD USING #10-16 SCREWS SPACED AT 457mm (18") O.C. BOTH FLANGES.

54 MIL (0.0566") BOTTOM TRACK WITH 76mm (3") LONG LEGS.

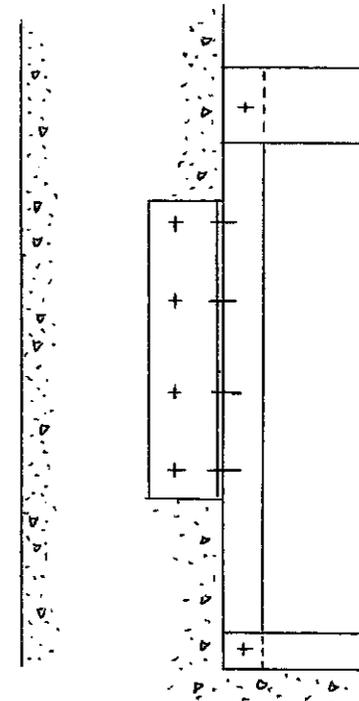
CONNECT THE TRACK TO THE CONCRETE USING TWO ROWS OF 6mm x 44mm (1/4"x 1 3/4") TAPCON SCREWS SPACED AT 457mm (18") O.C. SECURE THE TRACK TO EVERY VERTICAL STUD USING A #10-16 SCREW ON BOTH FLANGES.

# ATTMAR & PALLESCHI DRIVE, BRAMPTON

WINDOW SILL ANCHORAGE DETAIL 'SD-1'  
FOR END CONNECTION TO CONCRETE WALL  
REFERENCE EXAMPLE AT LINES A-A & A12



PLAN VIEW



SIDE VIEW



SEE SILL SECTION 'S2' FOR SILL CONSTRUCTION.

PLACE A 152mm x 41mm x 43 MIL (6"x 1 5/8"x 43 MIL) STUD AGAINST THE CONCRETE WALL.  
ENSURE THE STUD OVERLAPS THE CONCRETE A MINIMUM OF 76mm (3").

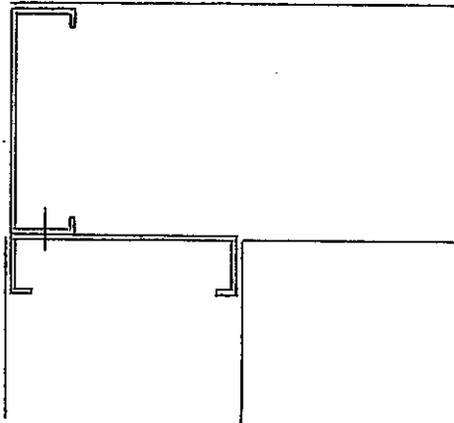
SECURE THE STUD TO THE CONCRETE USING THREE 6mm x 44mm (1/4"x 1 3/4") TAPCON SCREWS.

PLACE A 76mm x 76mm x 68 MIL x 305mm (3"x 3"x 0.0713"x 12") STEEL ANGLE AGAINST THE  
CONCRETE AS SHOWN. SECURE THE ANGLE TO THE CONCRETE USING FOUR 6mm x 44mm  
(1/4"x 1 3/4") TAPCON SCREWS AND TO THE STUD WITH FOUR #10-16 SCREWS.

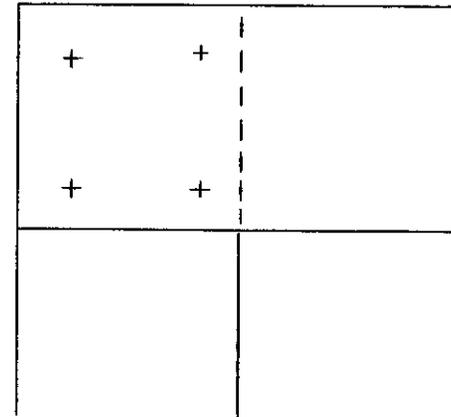
**NOTE: SPACE ALL TAPCON SCREWS A MINIMUM OF 76mm (3") APART AND KEEP ALL TAPCON  
SCREWS A MINIMUM OF 38mm (1 1/2") AWAY FROM ANY CONCRETE EDGE.**

# ATTMAR & PALLESCHI DRIVE, BRAMPTON

WINDOW SILL ANCHORAGE DETAIL 'SD-2'  
FOR CORNER WINDOW SILL CONNECTION  
REFERENCE EXAMPLE AT LINES A-F & A13



PLAN VIEW OF STUDS

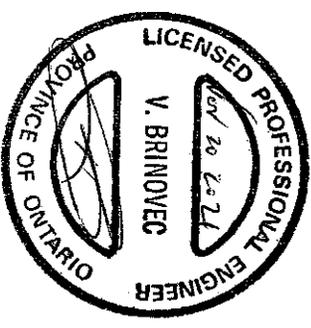


PLAN VIEW OF TOP TRACKS

SEE SILL SECTIONS 'S1' AND 'S2' FOR SILL CONSTRUCTION.  
PLACE TWO 152mm x 41mm x 43 MIL (6"x 1 5/8"x 43 MIL) STUDS AT THE CORNER AND CONNECT  
USING THREE #10-16 SCREWS.  
CUT ONE FLANGE OFF THE TOP TRACK AND OVERLAP THE TWO TRACKS.  
SECURE THE TWO TRACKS TOGETHER USING FOUR #10-16 SCREWS.

# ATTMAR & PALLESCHI DRIVE, BRAMPTON

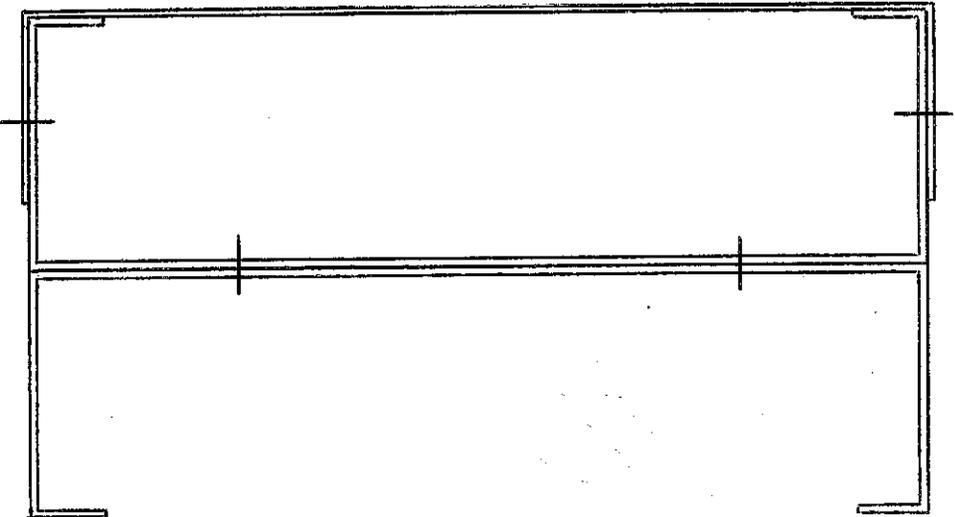
JAMB SECTION 'J1' - FOR ALL FLOORS ON ALL BUILDINGS  
THE MAXIMUM OPENING WIDTH IS NOT TO EXCEED 2085mm (82.1")



TWO 152mm x 41mm x 43 MIL  
(6" x 1 5/8" x 0.0451") STUDS  
AND ONE 43 MIL (0.0451")  
TRACK, WITH 32mm (1 1/4")  
LONG LEGS.

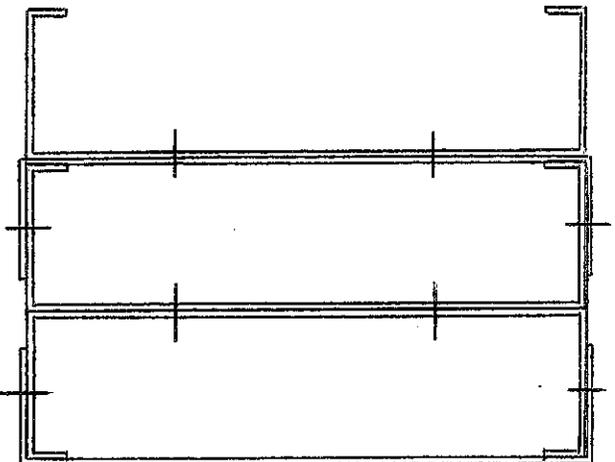
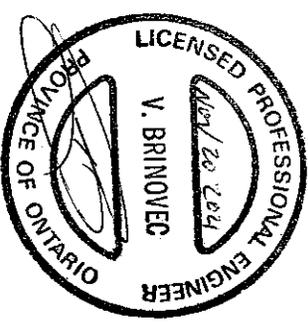
CONNECT THE TRACK TO  
THE STUD AND THE STUD TO  
THE STUD USING #10-16  
SCREWS SPACED AT 457mm  
(18") O.C. AS SHOWN.  
(4 SCREWS EVERY 18" O.C.)

INSULATE THE CAVITY AS  
REQUIRED.



# ATTMAR & PALLESCCHI DRIVE, BRAMPTON

JAMB SECTION 'J2' - FOR ALL FLOORS ON ALL BUILDINGS  
THE MAXIMUM OPENING WIDTH IS NOT TO EXCEED 3000mm (118.1")



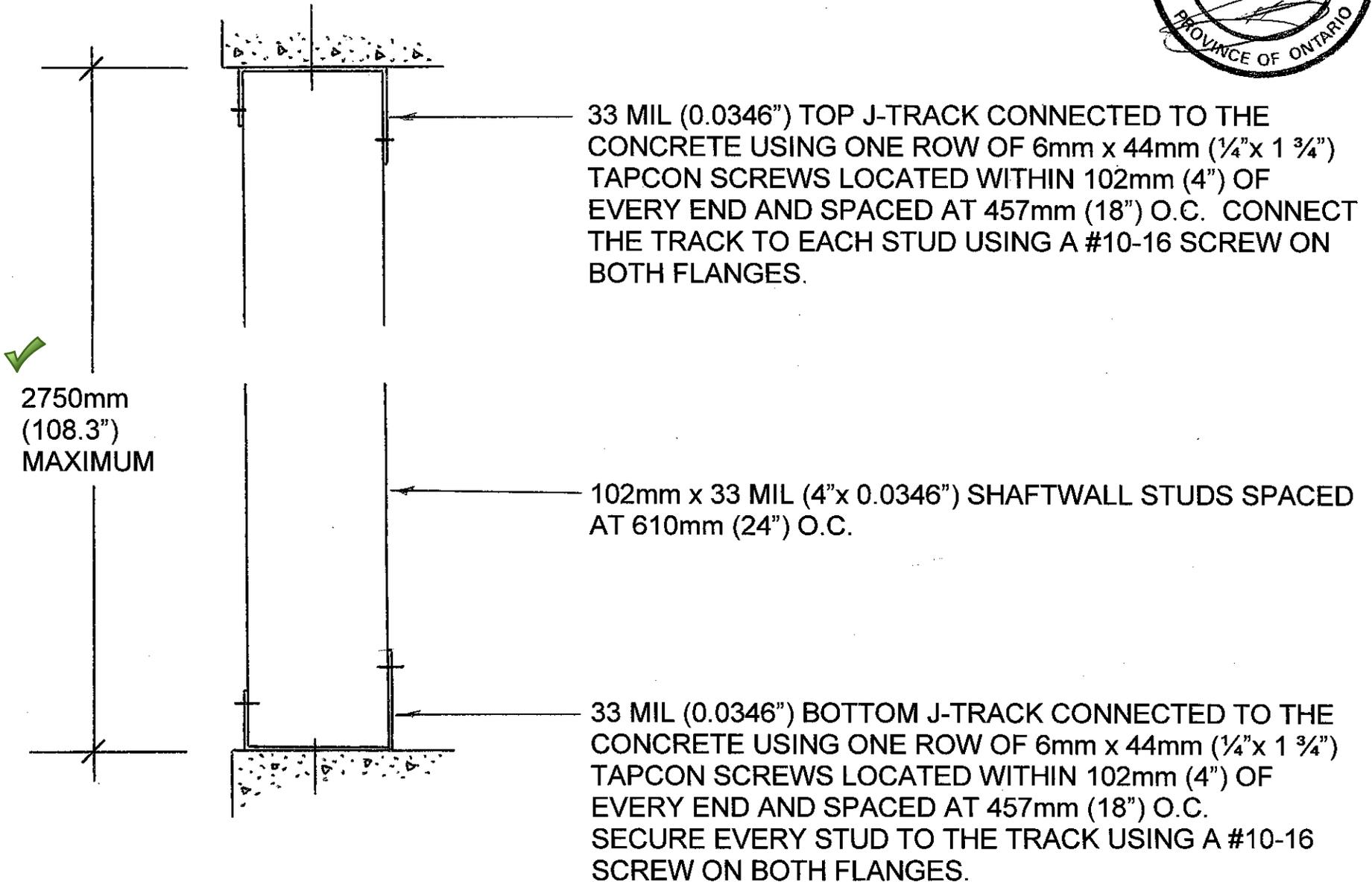
THREE 152mm x 41mm x 43 MIL  
(6" x 1 5/8" x 0.0451") STUDS AND  
TWO 43 MIL (0.0451") TRACKS,  
WITH 32mm (1 1/4") LONG LEGS.

CONNECT THE TRACKS TO  
THE STUDS AND THE STUDS  
TO THE STUDS USING #10-16  
SCREWS SPACED AT 457mm  
(18") O.C. AS SHOWN.  
(8 SCREWS EVERY 18" O.C.)

INSULATE THE CAVITY AS  
REQUIRED.

# ATTMAR & PALLESCI DRIVE, BRAMPTON

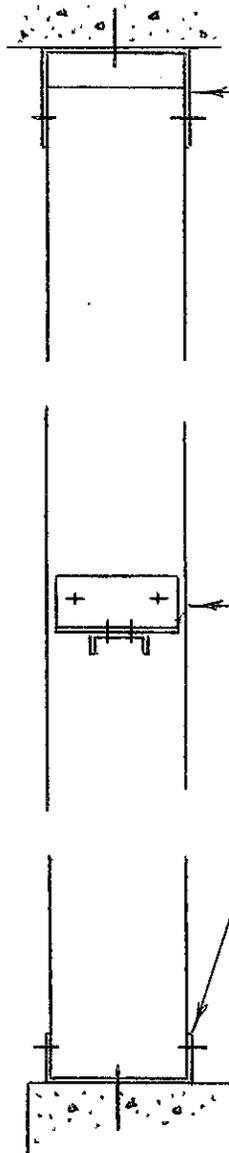
INTERIOR WALL SECTION 'INT-W1' – FOR INTERIOR GUARD WALLS AT ELEVATORS  
LOCATED ON ALL FLOORS



# ATTMAR & PALLESCHI DRIVE, BRAMPTON

INTERIOR WALL SECTION 'INT-W2' – FOR 2<sup>ND</sup> FLOOR INTERIOR GUARD WALLS ON BUILDING C  
LOCATED AT OPEN TO BELOW BETWEEN GRID LINES C5 AND C6

192.80m T/O  
3<sup>RD</sup> FLOOR



43 MIL (0.0451") SLOTTED TOP TRACK, WITH 64mm (2 1/2") LONG LEGS, CONNECTED TO THE CONCRETE USING ONE ROW OF 6mm x 44mm (1/4" x 1 3/4") TAPCON SCREWS LOCATED WITHIN 102mm (4") OF EVERY END AND SPACED AT 457mm (18") O.C. CONNECT THE TRACK TO EACH STUD USING A #10-16 SCREW ON BOTH FLANGES. THE SCREWS ARE TO BE PLACED IN THE CENTRE OF A 38mm (1 1/2") VERTICAL SLOT IN THE TRACK.

19mm (3/4") DEFLECTION GAP.

92mm x 41mm x 33 MIL (3 5/8" x 1 5/8" x 0.0346") VERTICAL STUDS SPACED AT 406mm (16") O.C. BRACE ALL STUDS WITH ONE ROW OF CONTINUOUS 38mm x 13mm x 43 MIL (1 1/2" x 1/2" x 0.0451") BRIDGING CHANNEL. SEE THE CHANNEL BRIDGING DETAIL.

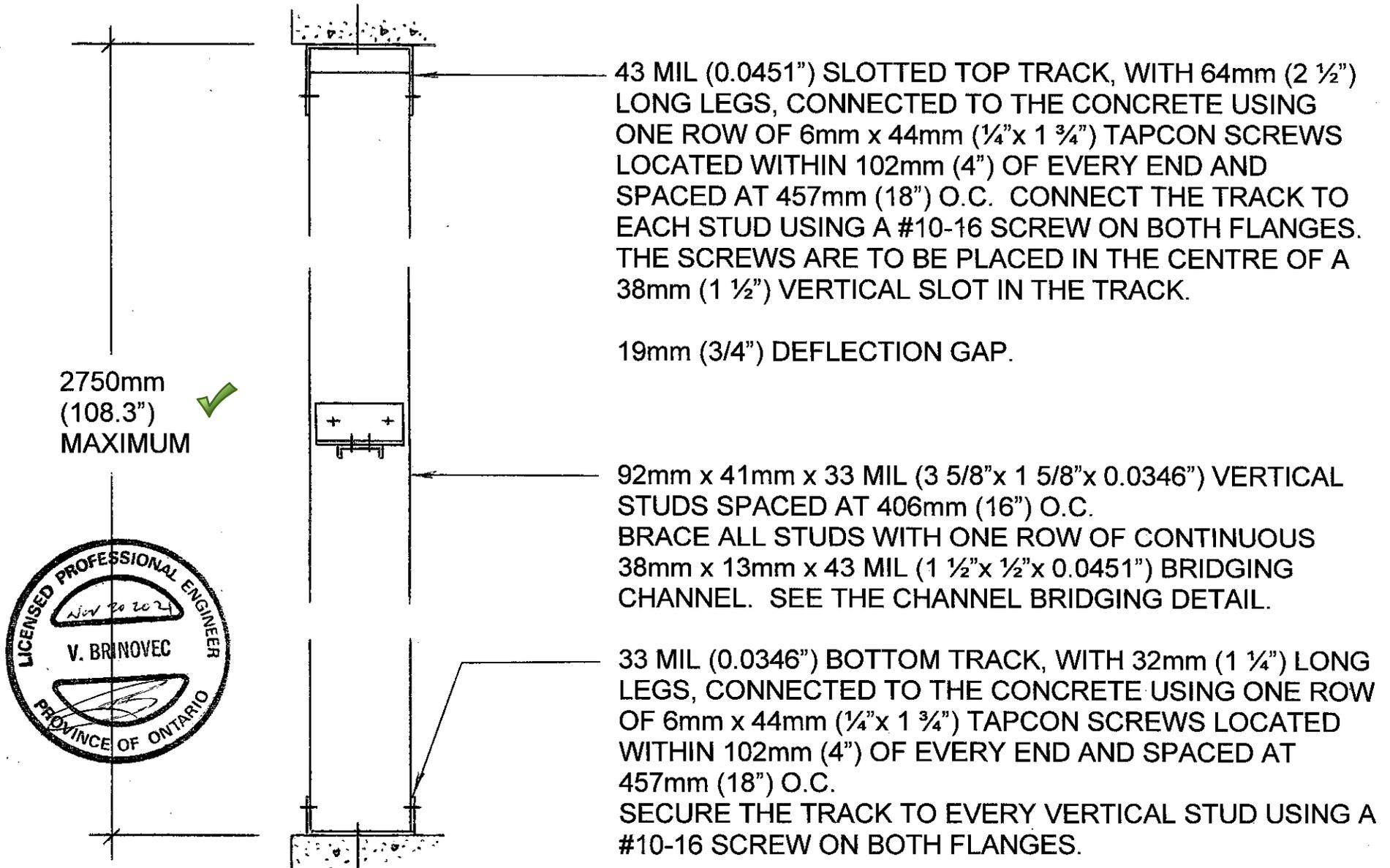
33 MIL (0.0346") BOTTOM TRACK, WITH 32mm (1 1/4") LONG LEGS, CONNECTED TO THE CONCRETE USING ONE ROW OF 6mm x 44mm (1/4" x 1 3/4") TAPCON SCREWS LOCATED WITHIN 102mm (4") OF EVERY END AND SPACED AT 457mm (18") O.C. SECURE THE TRACK TO EVERY VERTICAL STUD USING A #10-16 SCREW ON BOTH FLANGES.



189.85m T/O  
2<sup>ND</sup> FLOOR

# ATTMAR & PALLESCI DRIVE, BRAMPTON

INTERIOR WALL SECTION 'INT-W3' – FOR INTERIOR GUARD WALLS  
LOCATED ON ALL BUILDINGS AT THE INTERIOR SUITE STAIRS



43 MIL (0.0451") SLOTTED TOP TRACK, WITH 64mm (2 1/2") LONG LEGS, CONNECTED TO THE CONCRETE USING ONE ROW OF 6mm x 44mm (1/4" x 1 3/4") TAPCON SCREWS LOCATED WITHIN 102mm (4") OF EVERY END AND SPACED AT 457mm (18") O.C. CONNECT THE TRACK TO EACH STUD USING A #10-16 SCREW ON BOTH FLANGES. THE SCREWS ARE TO BE PLACED IN THE CENTRE OF A 38mm (1 1/2") VERTICAL SLOT IN THE TRACK.

19mm (3/4") DEFLECTION GAP.

92mm x 41mm x 33 MIL (3 5/8" x 1 5/8" x 0.0346") VERTICAL STUDS SPACED AT 406mm (16") O.C. BRACE ALL STUDS WITH ONE ROW OF CONTINUOUS 38mm x 13mm x 43 MIL (1 1/2" x 1/2" x 0.0451") BRIDGING CHANNEL. SEE THE CHANNEL BRIDGING DETAIL.

33 MIL (0.0346") BOTTOM TRACK, WITH 32mm (1 1/4") LONG LEGS, CONNECTED TO THE CONCRETE USING ONE ROW OF 6mm x 44mm (1/4" x 1 3/4") TAPCON SCREWS LOCATED WITHIN 102mm (4") OF EVERY END AND SPACED AT 457mm (18") O.C. SECURE THE TRACK TO EVERY VERTICAL STUD USING A #10-16 SCREW ON BOTH FLANGES.

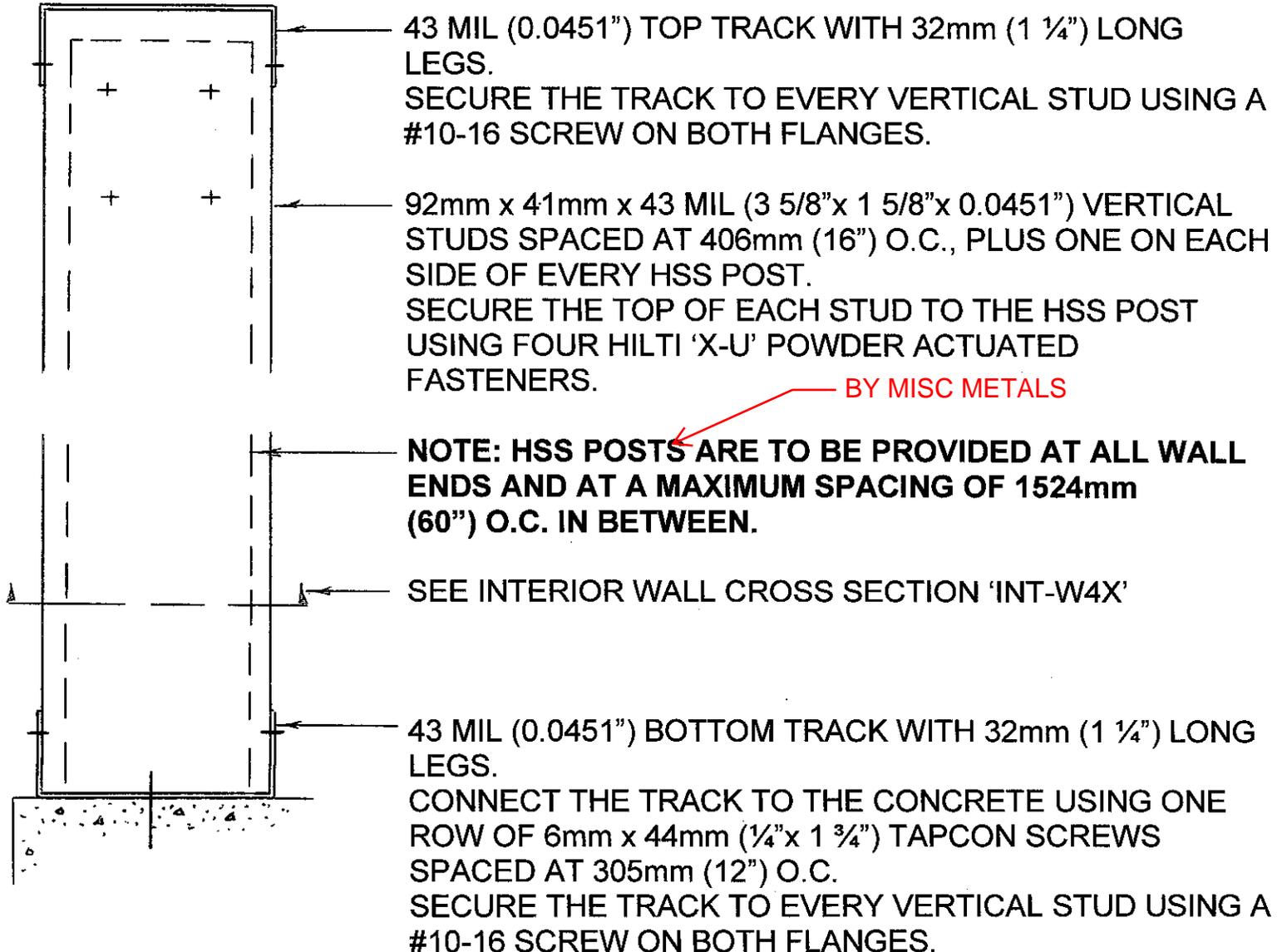
2750mm  
(108.3")  
MAXIMUM



# ATTMAR & PALLESCHI DRIVE, BRAMPTON

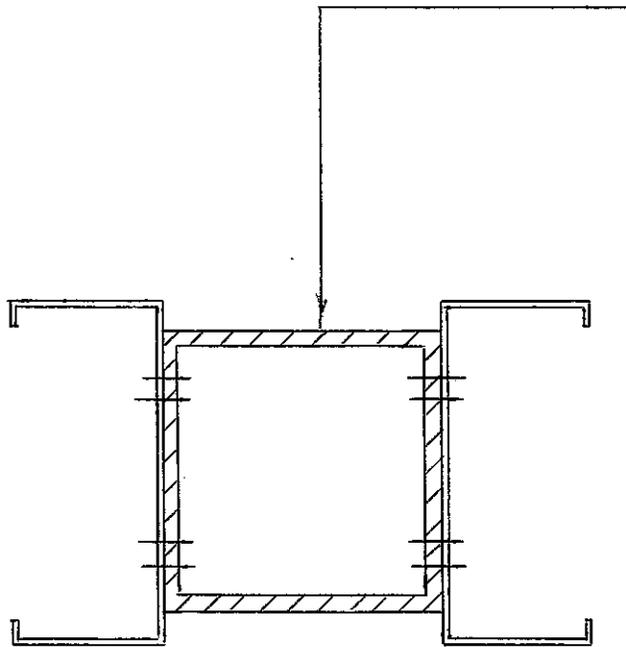
INTERIOR WALL SECTION 'INT-W4' – FOR CANTILEVERED GUARD WALLS AT STAIRS

LOCATED ON THE 4<sup>TH</sup> FLOOR OF ALL BUILDINGS – ARCH. REF. 1/A503 & 1/A504 & 1,3/A505 & 1/A506



# ATTMAR & PALLESCHI DRIVE, BRAMPTON

INTERIOR WALL CROSS SECTION 'INT-W4X'  
FOR CANTILEVERED GUARD WALLS AT STAIRS



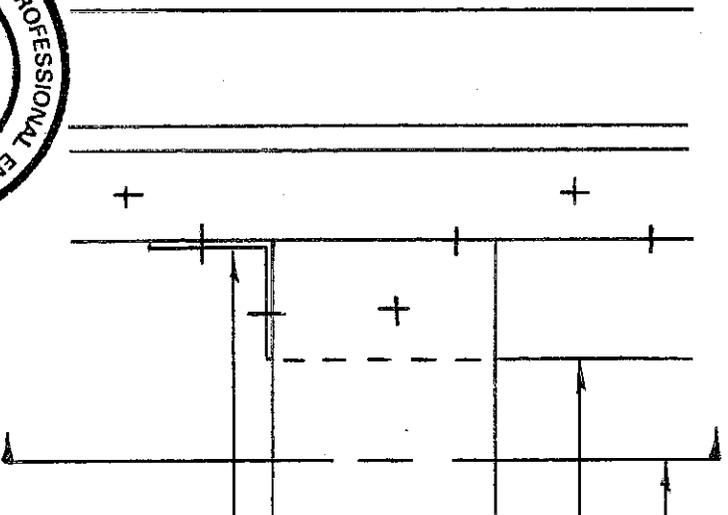
HSS POSTS ARE TO BE PROVIDED AT ALL ENDS AND AT  
A MAXIMUM SPACING OF 1524mm (60") O.C.  
**NOTE: THE HSS POST DESIGN, SUPPLY AND  
INSTALLATION IS BY OTHERS.**

BY MISC METALS



THE STUDS ARE TO BE 92mm x 41mm x 43 MIL (3 5/8" x 1 5/8" x 0.0451") SPACED AT 406mm (16") O.C., PLUS ONE ON EACH SIDE OF EVERY HSS POST. SECURE THE TOP OF EACH STUD TO THE HSS POST USING FOUR HILTI 'X-U' POWDER ACTUATED FASTENERS.  
THE TOP AND BOTTOM TRACKS ARE TO BE 43 MIL (0.0451") WITH 32mm (1 1/4") LONG LEGS.

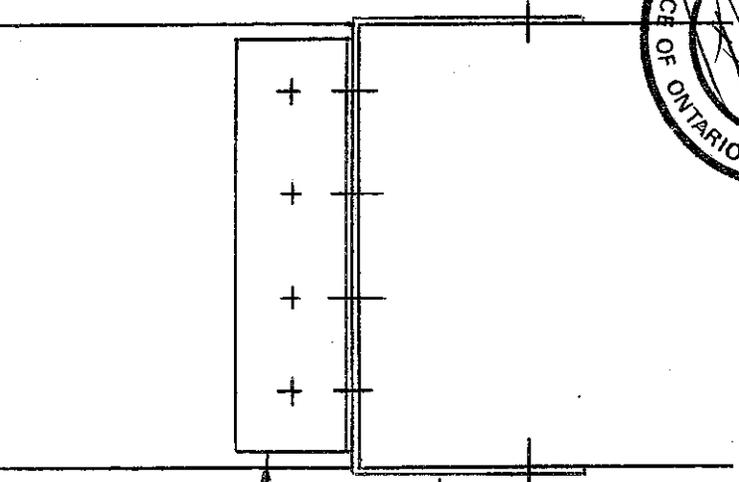
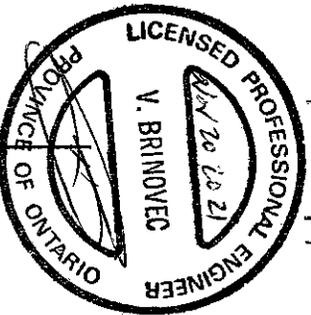
**ATTMAR & PALLESCI DRIVE, BRAMPTON**  
**HEAD/SILL ANCHORAGE DETAIL**  
**FOR 152mm (6") STRUCTURAL STUD FRAMING**



SECTION BELOW

PLACE A STRUCTURAL STEEL STUD AT EACH END OF THE HEAD/SILL.  
CONNECT THE STUD TO THE BUILT-UP JAMB USING FOUR #10 -16 SCREWS.

38mm x 38mm x 54 MIL x 140mm (1 1/2" x 1 1/2" x 0.0566" x 5 1/2") STEEL ANGLE ANCHOR PLACED AT EACH END OF THE HEAD/SILL.  
CONNECT EACH ANGLE TO THE HEAD/SILL USING FOUR #10 -16 SCREWS AND TO THE BUILT-UP JAMB USING FOUR #10 -16 SCREWS.

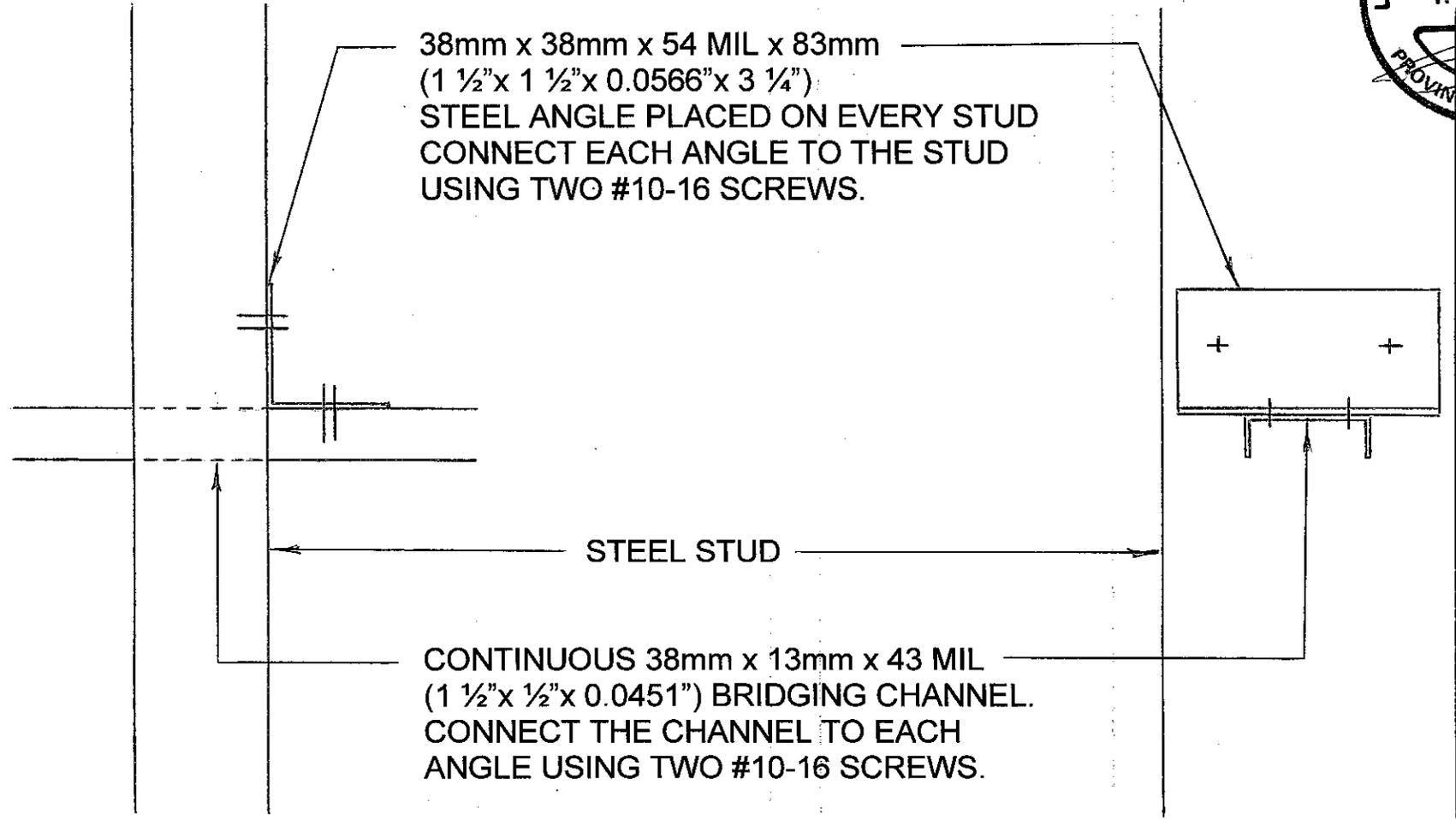


HEAD/SILL TRACK CONNECTED TO ALL VERTICAL STUDS USING A #10-16 SCREW ON BOTH SIDES.

38mm x 38mm x 54 MIL x 140mm (1 1/2" x 1 1/2" x 0.0566" x 5 1/2") STEEL ANGLE ANCHOR.

# ATTMAR & PALLESCI DRIVE, BRAMPTON

TYPICAL CHANNEL BRIDGING DETAIL FOR 92mm (3 5/8") STRUCTURAL STUD FRAMING



38mm x 38mm x 54 MIL x 83mm  
(1 1/2" x 1 1/2" x 0.0566" x 3 1/4")  
STEEL ANGLE PLACED ON EVERY STUD  
CONNECT EACH ANGLE TO THE STUD  
USING TWO #10-16 SCREWS.

STEEL STUD

CONTINUOUS 38mm x 13mm x 43 MIL  
(1 1/2" x 1/2" x 0.0451") BRIDGING CHANNEL.  
CONNECT THE CHANNEL TO EACH  
ANGLE USING TWO #10-16 SCREWS.

# ATTMAR & PALLESCI DRIVE, BRAMPTON

TYPICAL CHANNEL BRIDGING DETAIL FOR 152mm (6") STRUCTURAL STUD FRAMING

