



300 Dufferin Avenue
P.O. Box 5035
London, ON
N6A 4L9

London
CANADA

New Trend Fence Decorative Insert Panel: Guard Panel Approval Confirmation

DATE: May 6, 2015

Base on the submitted testing report dated March 22, 2010, the Alternative Solution submission dated March, 2008 and updated approval letter dated May 4, 2015 all prepared by Spriet Associates, and the limitations/testing conditions noted in said documents, we are accepting the use of the following deck panel guard:

Spiral, Falling Leaf, Mixed Leaf and Hummingbird

Please note that drawings submitted for building permit applications must make reference to the product identification name and the manufacturer. Proper identification is also required on site for verification by the building inspector. The product must be identified with the manufacturer's name, logo, or packaging.

The above guard panels have been approved with Galvanized steel brackets manufactured by Simpson Strong Tie, Part#FB24Z. Attachment details are as per submitted drawings dated March 11, 2010.

The approval does not include the two top and bottom horizontal rails or vertical posts and attachment to the deck. Load transfer from the panel to the deck will require a further submission and will be reviewed on an individual permit basis.

This approval is valid as long as the 2012 edition of the Ontario Building Code is applicable and is valid within the jurisdiction of the city of London only. Application for approval will be required again if a new edition of the Ontario Building Code is issued, or revisions are made to the current edition affecting loading conditions. Please feel free to contact the undersigned if you have any questions.

Note that this approval pertains to structural issues and climbability only. The guard must also satisfy the Ontario Building Code pertaining to height.

Please feel free to contact the undersigned if you have any questions.

Scott Sutherland
Architectural Plan Examiner

cc: A. DiCicco, Manager of Plans Examination
bldg. file

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Project: 215034 - New Trend Corporation Certification 2015
Date: May 4, 2015
Re: Falling Leaf, Humming Bird, Mixed Leaf, and Spiral - Decorative Insert Panels certification

Attention: Mr. Joe Pozeg, President

The above mentioned decorative steel insert panels, as shown in the attached drawings 'Deck Railing Structure assembly / Falling Leaf', 'Deck Railing Structure assembly / Mixed Leaf Panel', 'Deck Railing Structure assembly / Spiral', and 'Deck Railing Structure assembly / Humming Bird', sheet 1 of 1, Revision E dated March 11, 2010 have been reviewed for compliance to section 4.1.5.14, subsection 2, section 3.3.1.17 and 9.8.8.6 of the current edition (2012) of the Ontario Building Code ('O.B.C.').

Sample steel insert panels were previously submitted by New Trend Corporation for load testing. The load test was completed in 2010 and Spriet Associates issued a Letter of Certification that was submitted and accepted by the City of London.

To facilitate the load test, the steel insert panel was set in a pressure treated wood frame. The panels are made of 14 Gage steel and exhibits laser cut decorative patterns. The panels are provided with pre-formed holes and screws are used to fasten the panels to the wood backing.

The extent of the test was limited to the testing of the steel insert panels and their attachments to the wood frames. The wood frames were not included in our analysis and the design of the wood frame members (the top and bottom rails, lateral backing, the posts, and their connectors) should be assessed based on each specific application.

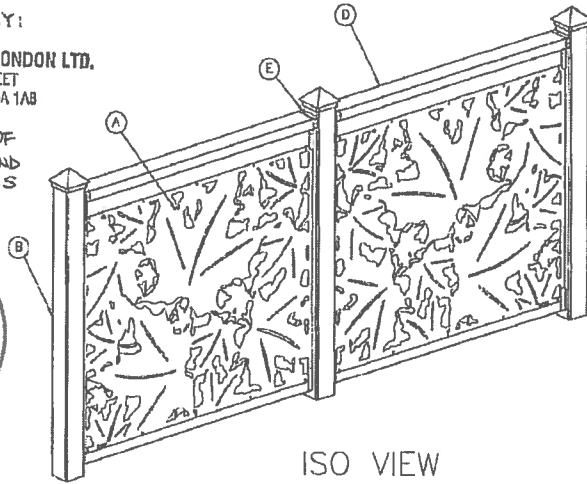
It was determined that the steel insert panels and the materials used to connect the panel to the wood substrate can withstand a factored load of 0.75 KN, applied over an area of 100 mm x 100 mm.

In accordance with section 9.8.8.6 of the 2012 O.B.C. the panels were reviewed and found to be non-climbable, with a view to the climbability restrictions outlined in the 2006 version of the code (although the current code does not clearly outline the requirements for non-climbability, the 2006 code does indicate what the requirements are, in section 9.8.8.6.). The attached shop drawings indicate the worst case condition and provide dimensions that can be used for a peer review.

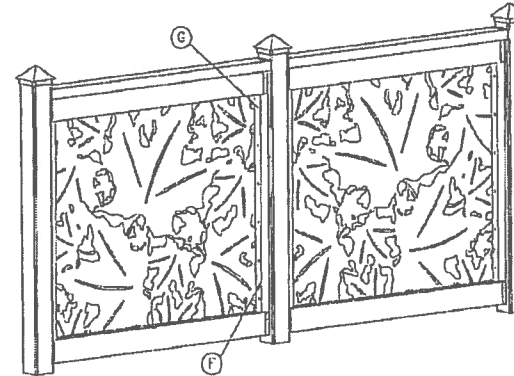
REVIEWED BY:

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155 YORK STREET
LONDON, ONT. N6A 1A8

FOR ADEQUACY OF
STEEL PANELS AND
THEIR CONNECTIONS
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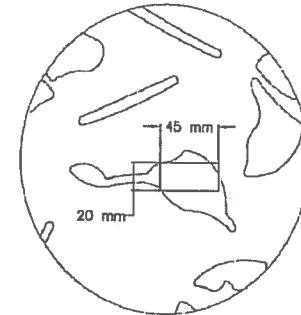


ISO VIEW

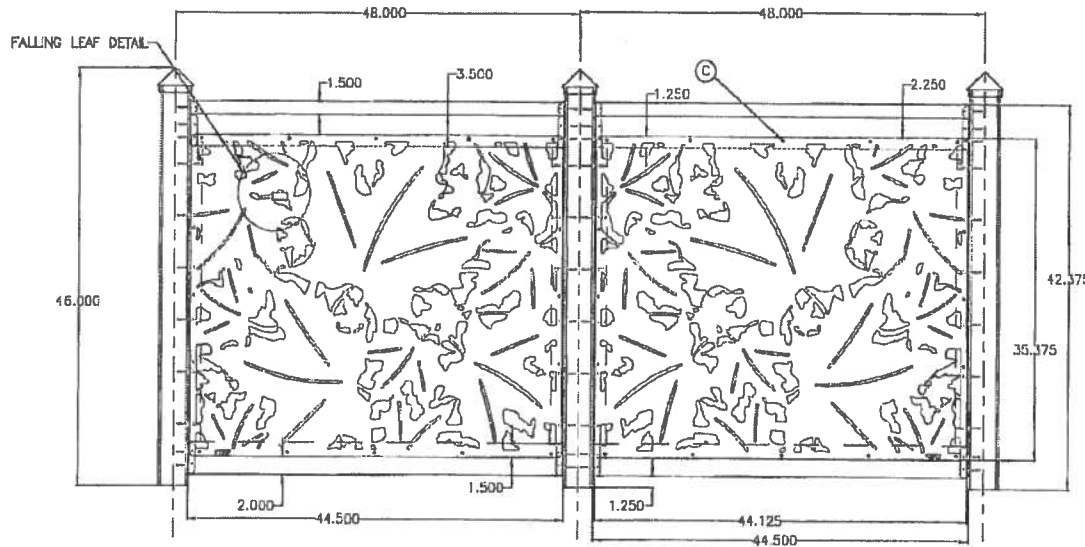


REVERSED ISO VIEW

A	JAN. 01/10	INITIAL RELEASE
B	JAN. 18/10	ADDED SCREW COVERS
C	FEB. 03/10	REMOVED UPPER BRACKETS
D	MAR. 08/10	ADDED SIDE SCREW COVERS
E	MAR. 11/10	STRENGTHEN PANEL W/BI SIDE FIBRES



FALLING LEAF DETAIL
SCALE 4:1



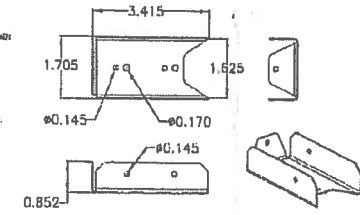
FALLING LEAF PANEL

2 - #8 X 1 1/2" DECK SCREW
USED TO FASTEN EACH SIDE BRACKET
TO 4" X 4" POST. 12 PLCS REQUIRED.

3 - #8 X 1 1/2" DECK SCREW
USED TO FASTEN EACH 2" X 4" CROSS-MEMBER
TO WALL BRACKET. 12 PLCS REQUIRED.

4 - #8 X 1 1/2" DECK SCREW
USED TO FASTEN 2" X 4" SIDE MEMBER
TO 4" X 4" POST. 4 PLCS REQUIRED.

10 - #8 X 1 1/2" DECK SCREW
USED TO FASTEN REINFORCING PANEL
TO 2" X 4" CROSS-MEMBER AND
2" X 4" SIDE MEMBER. 2 PLCS REQUIRED.



DETAIL E: GALVANIZED STEEL BRACKET
MANUFACTURER: SIMPSON STRONG TIE. PART #FB242

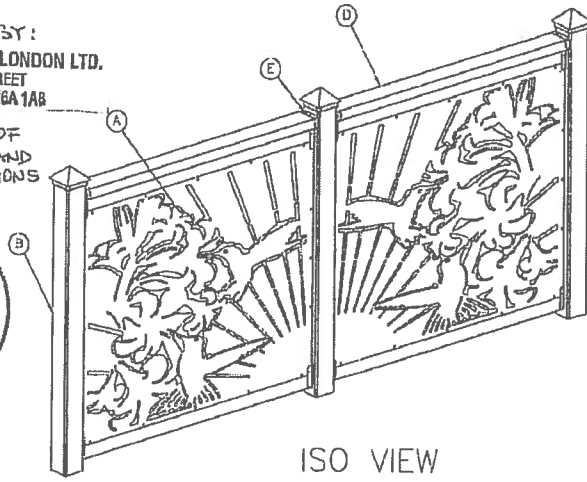
DETAIL	DESCRIPTION	MATERIAL	QUANTITY
D	DECK SCREW	#8 DECK SCREW X 1.50" LONG	24
F	SIDE MEMBER	P.L. 2 X 2 X 33.875	4
E	STEEL BRACKET	2 X 4 GALVANIZED STEEL BRACKET	12
D	CROSS-MEMBER	P.L. 2 X 4 X 44.50	8
C	DECK SCREW	#8 DECK SCREW X 1.50" LONG	80
B	POST	P.L. 4 X 4 X 48	3
A	REINFORCING PANEL	CNL. 14 GA. X 26.75 X 44.25	2
DETAIL	DESCRIPTION	MATERIAL	QUANTITY



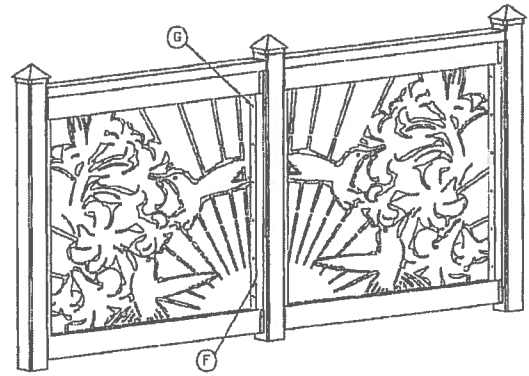
PROJECT	TESTING
DESC.	DECK RAILING STRUCTURE ASSEMBLY/FALLING LEAF
SCALE	1-1
PROJECTION	⊙ ◁
DRAWN BY	REINFORCED ENGINEERING DESIGNS

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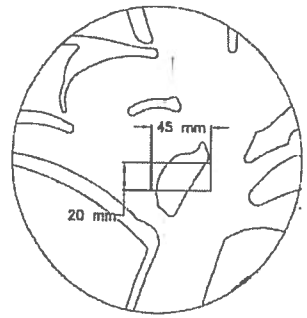


ISO VIEW

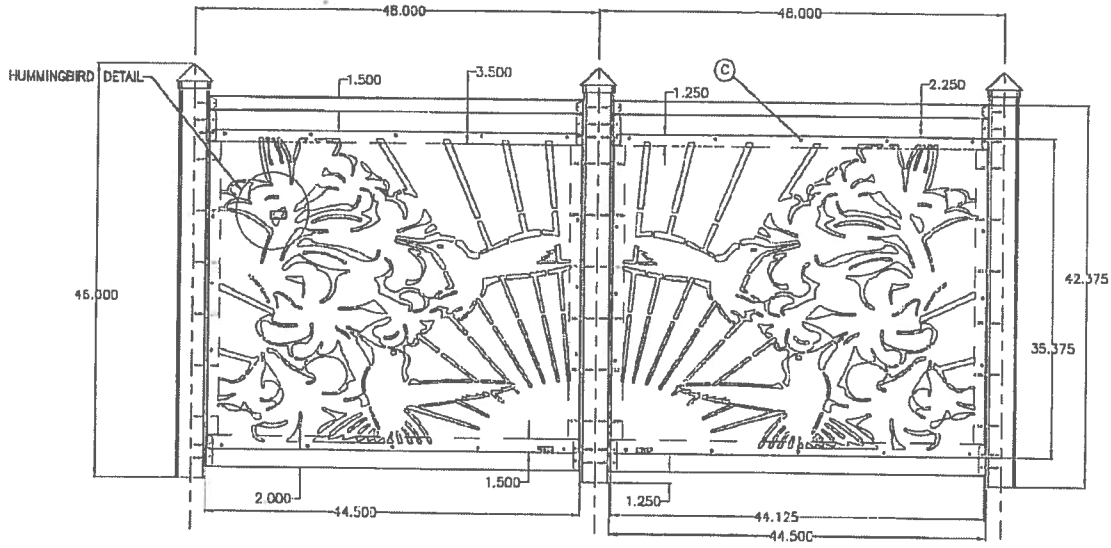


REVERSED ISO VIEW

A	JAN. 01/10	INITIAL RELEASE
B	JAN. 18/10	ADDED SCREW COVERS
C	FEB. 03/10	REMOVED UPPER BRACKETS
D	MAR. 08/10	ADDED SIDE SCREW COVERS
E	MAR. 11/10	STRENGTHEN PANEL WITH SIDE PIECES



HUMMINGBIRD DETAIL
 SCALE 4:1



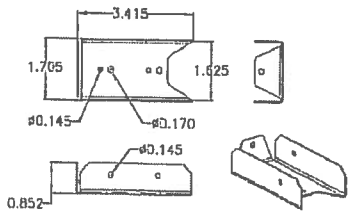
HUMMINGBIRD PANEL

3 - #8 x 1.5" DECK SCREWS
 USED TO FASTEN EACH STEEL BRACKET
 TO 4" x 4" POST. 13 PILES REQUIRED.

2 - #8 x 1.5" DECK SCREWS
 USED TO FASTEN EACH 1" x 4" CROSSMEMBER
 TO STEEL BRACKET. 12 PILES REQUIRED.

8 - #8 x 1.5" DECK SCREWS
 USED TO FASTEN 2" x 4" SIDE MEMBER
 TO 4" x 4" POST. 4 PILES REQUIRED.

10 - #8 x 1.5" DECK SCREWS
 USED TO FASTEN BRACKET PANEL
 TO 2" x 4" CROSSMEMBER AND
 2" x 4" SIDE MEMBER. 2 PILES REQUIRED.



DETAIL E: GALVANIZED STEEL BRACKET
 MANUFACTURER: SIMPSON STRONG TIE. PART #FB24Z

ITEM	DESCRIPTION	MATERIAL	QUANTITY
O	DECK SCREW	#8 DECK SCREW X 3.100" LONG	24
F	SIDE MEMBER	P.T. 2 X 2 X 33.875	4
E	STEEL BRACKET	2 X 4 GALVANIZED STEEL BRACKET	12
D	CROSSMEMBER	P.T. 2 X 4 X 41.20	6
C	DECK SCREW	#6 DECK SCREW X 1.500" LONG	80
B	POST	P.T. 4 X 4 X 48	3
A	DECORATIVE PANEL	CBS. 14 GA. X 35.75 X 44.25	2
DETAIL	DESCRIPTION	MATERIAL	QUANTITY
			2

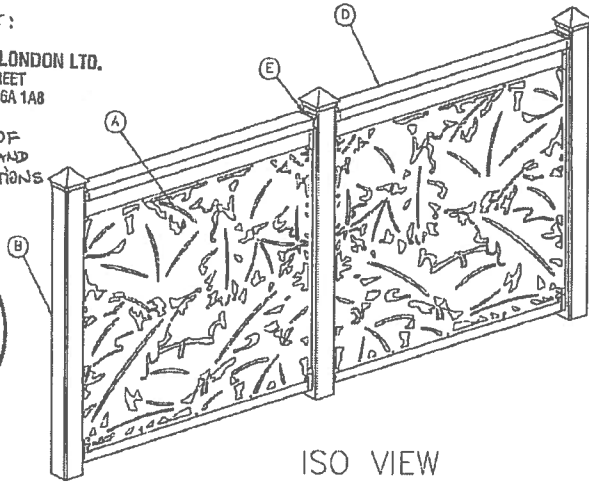
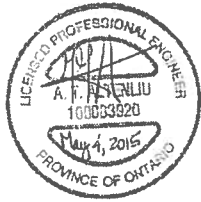


PROJECT	TESTING
DESC.	DECK RAILING STRUCTURE ASSEMBLY/HUMMINGBIRD
SCALE	1-1
PROJECTION	③ ◁
DRAWN BY	REINFORCED ENGINEERING DESIGNS

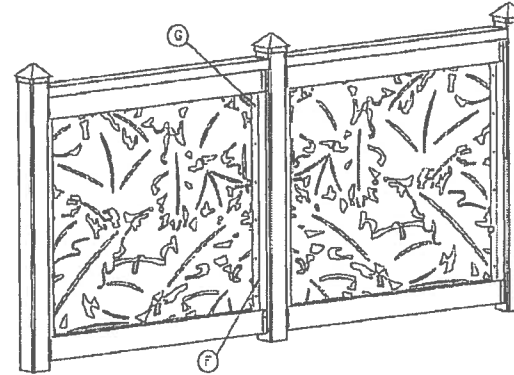
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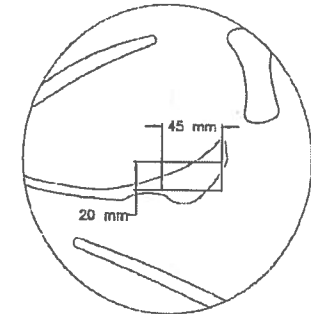


ISO VIEW

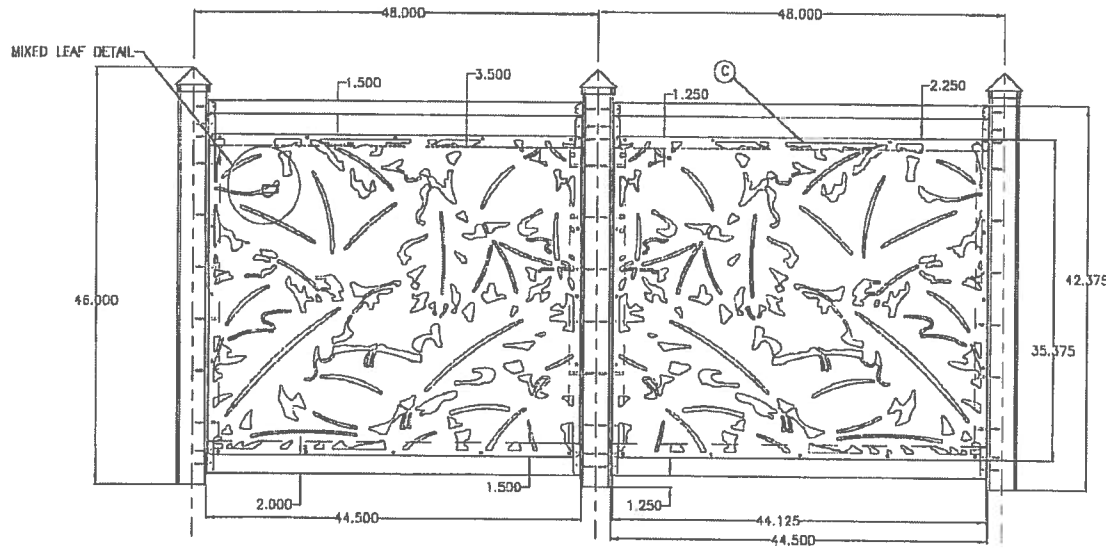


REVERSED ISO VIEW

A	JAN. 01/10	INITIAL RELEASE
B	JAN. 18/10	ADDED SCREW COVERS
C	FEB. 03/10	REMOVED UPPER BRACKETS
D	MAR. 08/10	ADDED SIDE SCREW COVERS
E	MAR. 11/10	STRENGTHEN PANEL WITH SIDE PICES

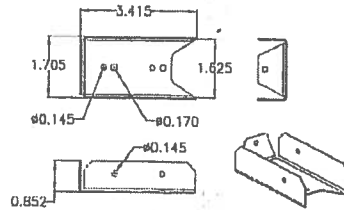


MIXED LEAF DETAIL
SCALE 4:1



MIXED LEAF PANEL

- 2 - #8 x 1.5" DECK SCREWS USED TO FASTEN EACH STEEL BRACKET TO 4" X 4" POST. 12 PILES REQUIRED.
- 3 - #8 x 1.5" DECK SCREWS USED TO FASTEN EACH 1" X 1" CROSSMEMBER TO STEEL BRACKET. 12 PILES REQUIRED.
- 8 - #8 x 1.5" DECK SCREWS USED TO FASTEN 1" X 2" SIDE MEMBER TO 4" X 4" POST. 4 PILES REQUIRED.
- 10 - #8 x 1.5" DECK SCREWS USED TO FASTEN DECORATIVE PANEL TO 2" X 2" CROSSMEMBER AND 1" X 2" SIDE MEMBER. 2 PILES REQUIRED.



DETAIL E: GALVANIZED STEEL BRACKET
MANUFACTURER: SIMPSON STRONG TIE. PART #FB24Z

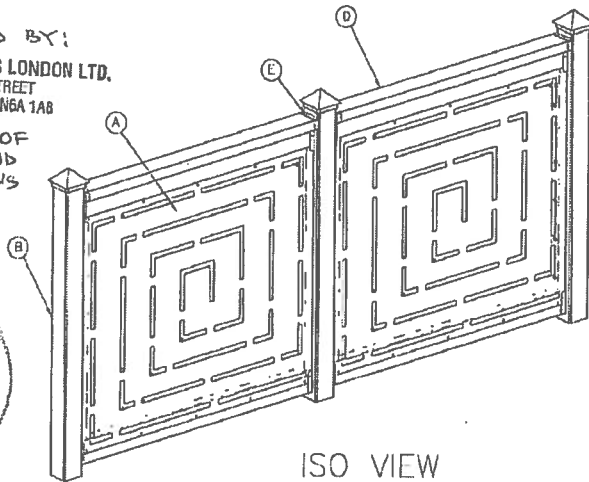
ITEM	DESCRIPTION	QUANTITY	UNIT
D	DECK SCREW	#8 DECK SCREW X 3.00" LONG	24
F	SIDE MEMBER	P.T. 2 X 2 X 33.075	4
E	STEEL BRACKET	2 X 4 GALVANIZED STEEL BRACKET	12
D	CROSSMEMBER	P.T. 2 X 4 X 44.50	6
C	DECK SCREW	#8 DECK SCREW X 1.50" LONG	80
B	POST	P.T. 4 X 4 X 48	3
A	DECORATIVE PANEL	CRS. 14 GA. X 38.75 X 44.25	2
	MATERIAL		2



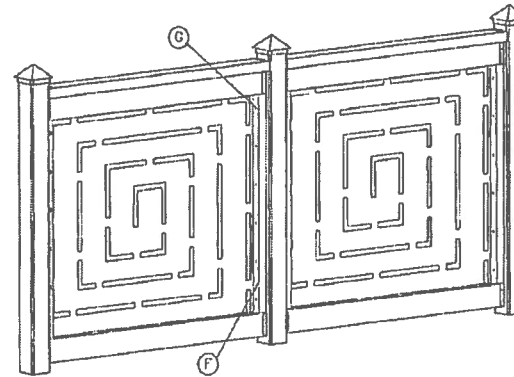
PROJECT	TESTING
DESC.	DECK RAILING STRUCTURE ASSEMBLY/MIXED LEAF
SCALE 1-1	PROJECTION
DRAWN BY	REINFORCED ENGINEERING DESIGNS

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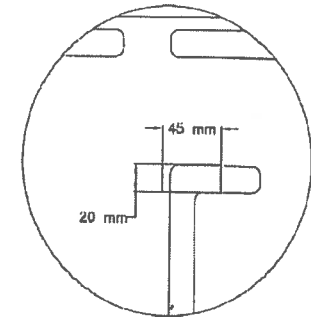


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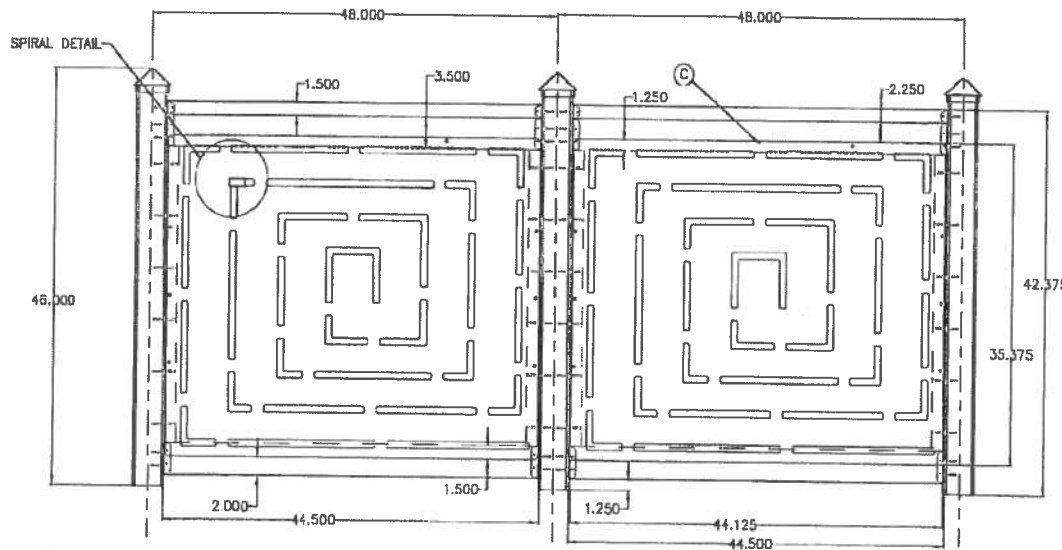


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E	MAR. 11/10	STRENGTHEN PANEL WITH SIDE PIERCE



SPIRAL DETAIL
SCALE 4:1



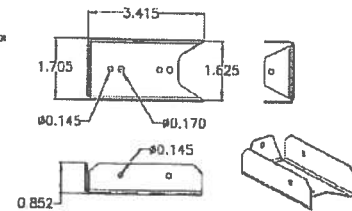
SPIRAL PANEL

3 - #8 X 1.5" DECK SCREWS
NEED TO FASTEN EACH SPIRAL BRACKET
TO 4" X 4" POST. 12 PILES REQUIRED.

3 - #8 X 1.5" DECK SCREWS
NEED TO FASTEN EACH 2" X 4" CROSSMEMBER
TO STEEL BRACKET. 18 PILES REQUIRED.

8 - #8 X 1.5" DECK SCREWS
NEED TO FASTEN 2" X 4" SIDE MEMBER
TO 4" X 4" POST. 4 PILES REQUIRED.

10 - #8 X 1.5" DECK SCREWS
NEED TO FASTEN CROSSING PANEL
TO 2" X 4" CROSSMEMBERS AND
1" X 4" SIDE MEMBERS. 2 PILES REQUIRED.



DETAIL E: GALVANIZED STEEL BRACKET
MANUFACTURER: SIMPSON STRONG TIE. PART #FB24Z

REF.	DESCRIPTION	MATERIAL	QTY
D	DECK SCREW	#8 DECK SCREW X 3.03" LONG	24
F	SIDE MEMBER	P.T. 2 X 2 X 33.875	4
E	STEEL BRACKET	2 X 4 GALVANIZED STEEL BRACKET	12
B	CROSSMEMBER	P.T. 2 X 4 X 44.20	8
C	DECK SCREW	#8 DECK SCREW X 1.50" LONG	80
B	POST	P.T. 4 X 4 X 48	3
A	DEGRADIVE PANEL	CHS. 14 GA. X 35.70 X 49.25	2
DETAIL	DESCRIPTION	MATERIAL	QTY



PROJECT	TESTING
DESC.	DECK RAILING STRUCTURE ASSEMBLY/SPIRAL
SCALE	1-1
PROJECTION	⊙
DRAWN BY	REINFORCED ENGINEERING DESIGNS