



RESIDENTIAL DECKS

This guide is intended to inform the public about the requirements for building permits and construction standards for residential decks. It does not include every detail of building construction and is not a substitute for the standards that regulate the construction of buildings. Reference should always be made to the Ontario Building Code and all other applicable laws including the Township of Southgate By-laws.

Residential Decks

Residential decks are a common feature used today to extend the living area of the house beyond its walls. Generally, the construction of a deck is regulated by two pieces of legislation; The Ontario Building Code and the Municipality Zoning By-Laws. The Ontario Building Code establishes standards for public health and safety, fire protection and structural sufficiency in the design and construction of buildings. Zoning By-laws help guide development and protect the rights of residents.

Do I need a Building Permit?

According to the Building Code Act, the construction of any raised deck attached and/or adjacent to a building requires a building permit. As a matter of policy however the Township of Southgate does not insist on a permit for an uncovered deck that is 600mm (1' 11") or less above the adjacent pre-construction ground-level at all locations around its perimeter if it is not attached to the building. The policy does not apply where the ground has been artificially raised through grading, landscaping or planters.

Application Checklist

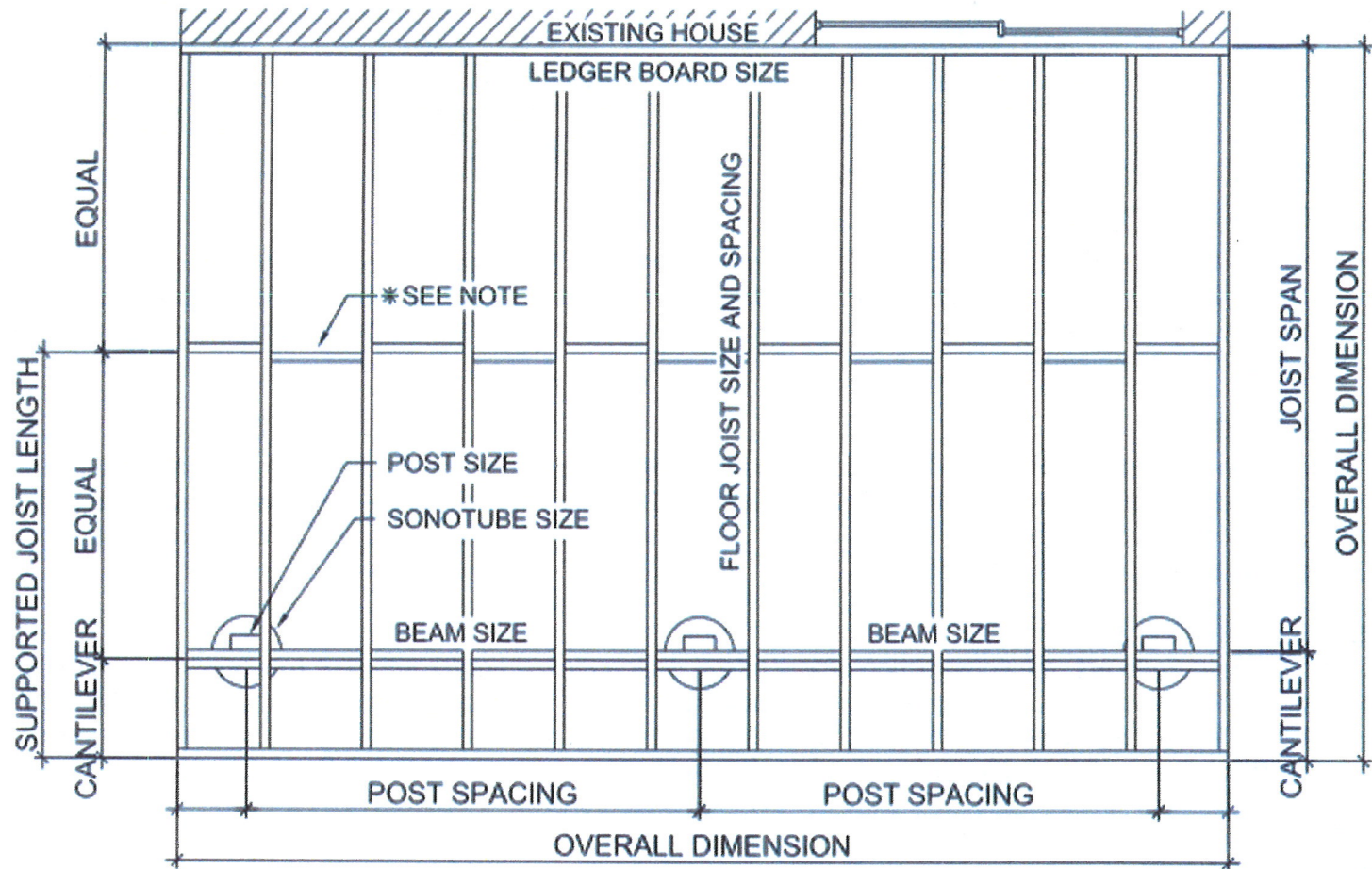
Application Requirements

- ✓ Completed Permit Application form, Schedule 1 Designer Information form and Applicable Law Checklist
- ✓ 2 complete sets of plans that are legible and drawn to scale
- ✓ Prescribed fees

Drawing Requirements

[The sample drawings attached to this guide illustrate typical construction details for a wood deck. These details can be used to supplement your permit application]

Site Plan	Foundation/ Floor Plan	Elevations/ Cross Section	Guard construction details
Lot lines including dimensions	Footing size, location and dimensions	Footing depth and construction	Support details such as deck to house connection
Location of proposed deck	Structure with full dimensions	Height of deck walking surface above grade	
Dimensioned to other building & septic	Beam sizes	Height of guard above walking surface	
Municipal address/ legal description	Floor joist size, floor joist span and direction	Stair details/dimensions	



Deck Layout and Span Tables

DATE:
JANUARY 2016'

SCALE:
NOT TO SCALE

DRAWING NO.:

9-3a

Deck Layout

**All decking is to be 5/4 x 6 wood material or approved equal

Maximum 2-Ply Beam Length			
Supported Joist Length	2 x 8	2 x 10	2 x 12
8'-0"	8'-7"	10'-6"	12'-3"
10'-0"	7'-8"	9'-4"	10'-8"
Maximum 3-Ply Beam Length			
8'-0"	10'-8"	13'-0"	15'-1"
10'-0"	9'-6"	11'-8"	13'-6"
12'-0"	8'-7"	10'-6"	12'-2"
Maximum 4-Ply Beam Length			
8'-0"	11'-1"	14'-2"	17'-3"
10'-0"	10'-4"	13'-2"	15'-6"
12'-0"	—	12'-2"	14'-1"

Maximum Floor Joist Length		
Joist Size	Max. Span	Max. Cantilever
2x8 @ 12" O.C.	11'-7"	20"
2x8 @ 16" O.C.	10'-7"	16"
2x8 @ 24" O.C.	9'-3"	14"
2x10 @ 12" O.C.	14'-10"	24"
2x10 @ 16" O.C.	13'-6"	24"
2x10 @ 24" O.C.	11'-9"	20"
2x12 @ 12" O.C.	18'-0"	24"
2x12 @ 16" O.C.	16'-5"	24"
2x12 @ 24" O.C.	14'-4"	20"

* Install solid blocking when floor joist span exceeds 6'-10". Blocking required to be of the same material and size as the floor joist and located not more than 6'-10" from each support and other rows of blocking.



BUILDING DEPARTMENT

Deck Details

Guard, Post, Beam, Footing and Ledger Board

DATE: JANUARY 2016

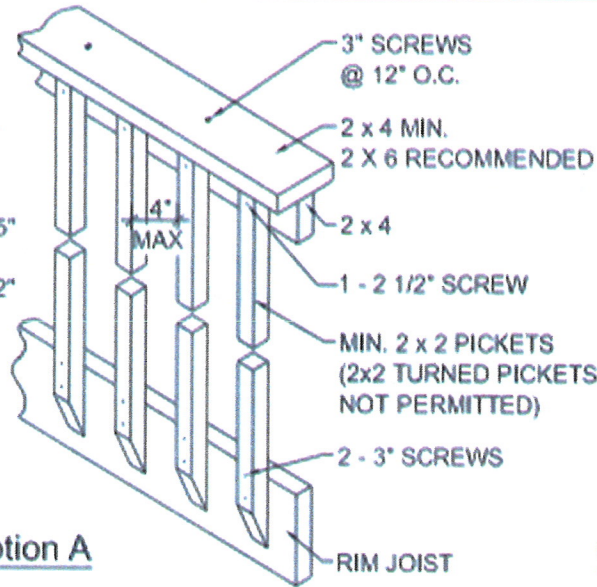
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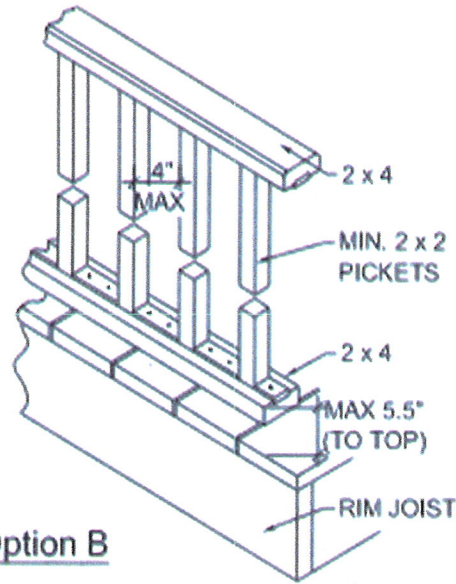
9-3b

MIN. GUARD HEIGHT WITH DECKS:
 - 5'-11" OR LESS ABOVE GROUND = 35"
 - MORE THAN 5'-11" ABOVE GROUND = 42"

Option A

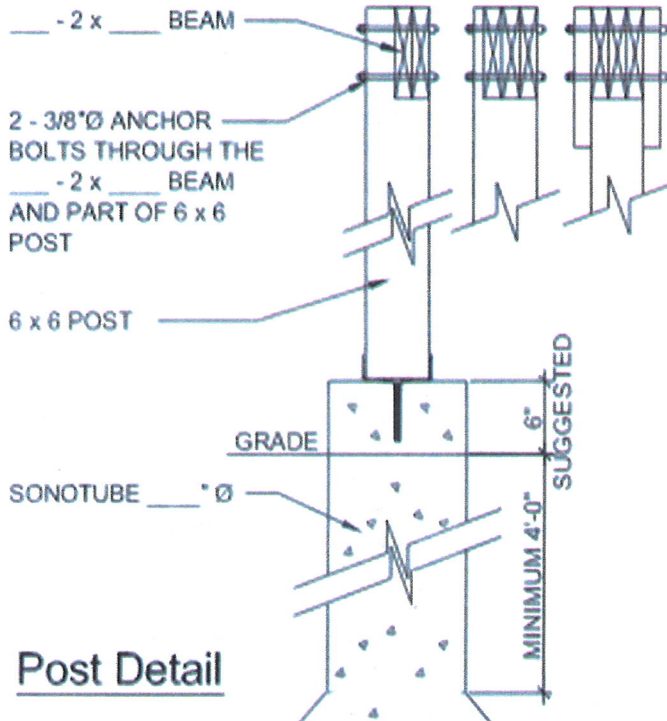


Option B



NOTE: ANYTHING OTHER THAN A WOOD GUARD/RAILING, PLEASE SUBMIT A COPY OF THE PRE-ENGINEERED GAURD/RAILING DETAILS WITH YOUR BUILDING APPLICATION.

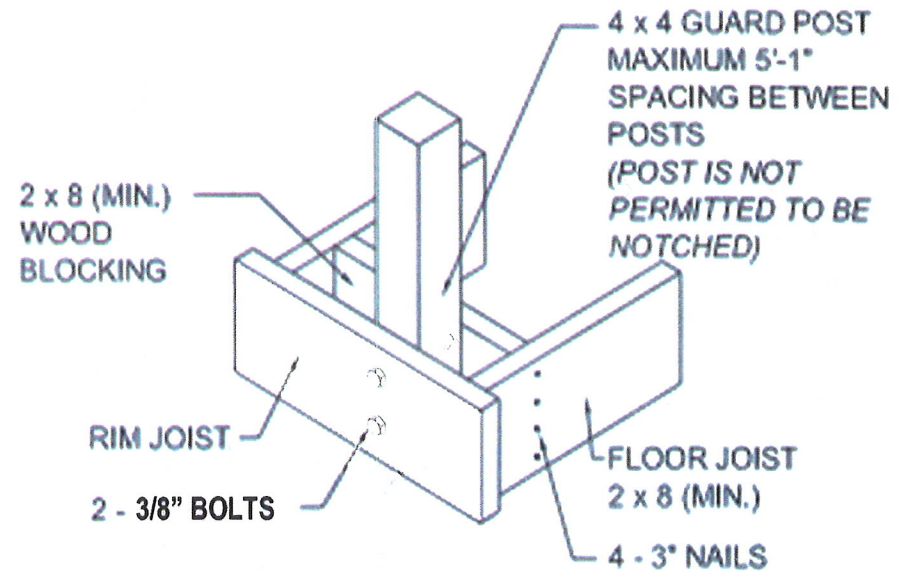
Guard Details



Post Detail

**ADDITIONAL LATERAL BRACING MAY BE REQUIRED. CONFIRM WITH BUILDING INSPECTOR @ FRAMING INSPECTION.

OR REFER TO SB7



Guard Post Detail



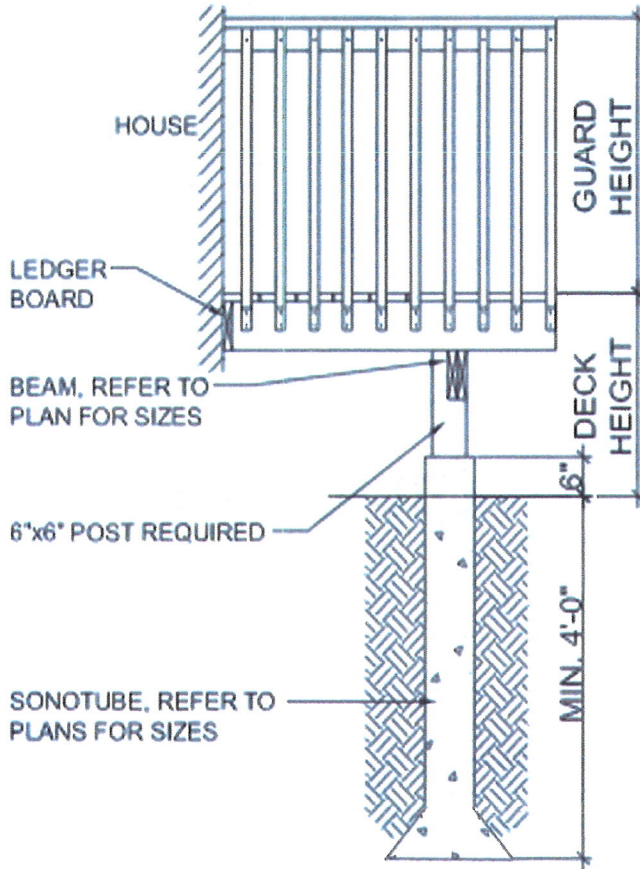
BUILDING DEPARTMENT

Deck Elevations and Details

DATE:
JANUARY 2016

SCALE:
NOT TO SCALE

DRAWING NO.:
9-3c



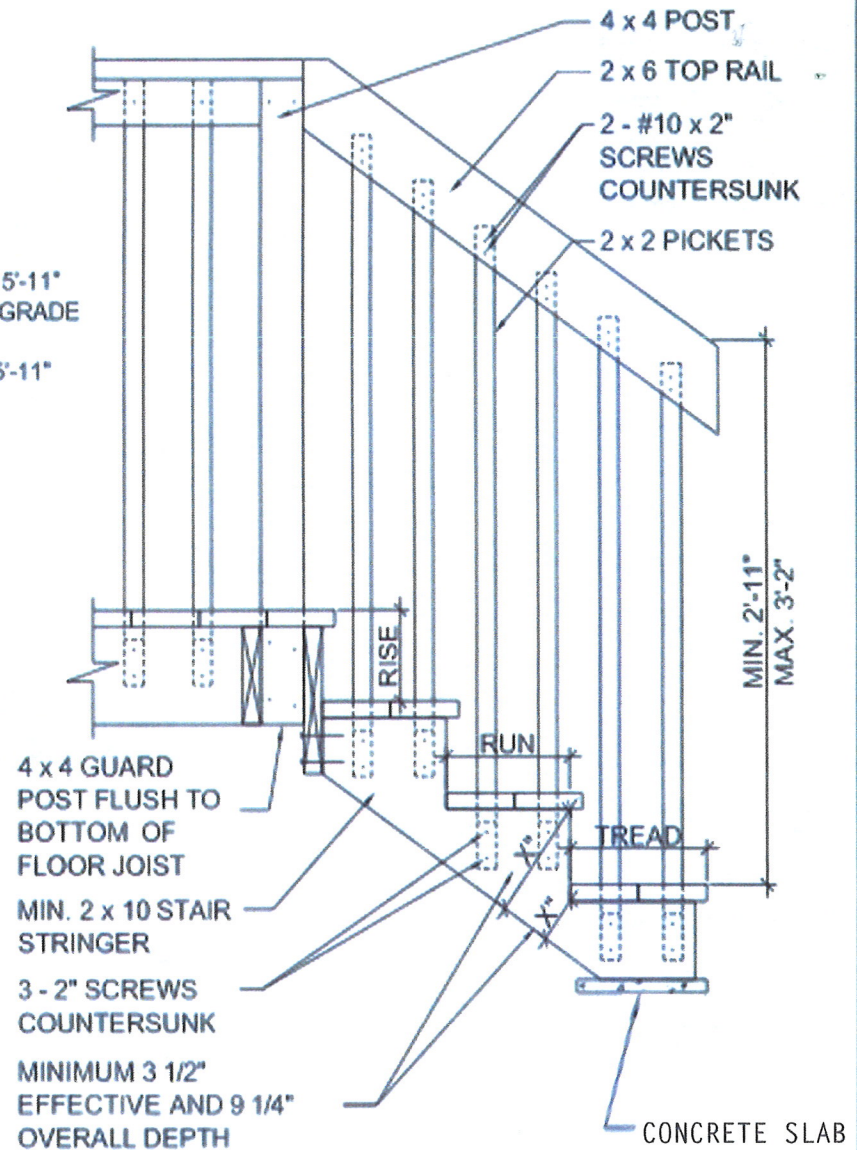
Deck Elevation

- 35" FOR DECKS 5'-11" OR LESS ABOVE GRADE
- 42" FOR DECKS GREATER THAN 5'-11" ABOVE GRADE.

Sonotube Sizes

Diameter	*Weight
10"Ø	1635 lbs
12"Ø	2355 lbs
14"Ø	3207 lbs
16"Ø	4189 lbs

*Weight = (supported joist length each side of post x half beam length each side of post) x 80 lbs/SF



Stair Detail

Stair Dimensions

Type	Max.	Min.
Rise	7 7/8"	4 7/8"
Run	14"	8 1/4"
Tread	14"	9 1/4"

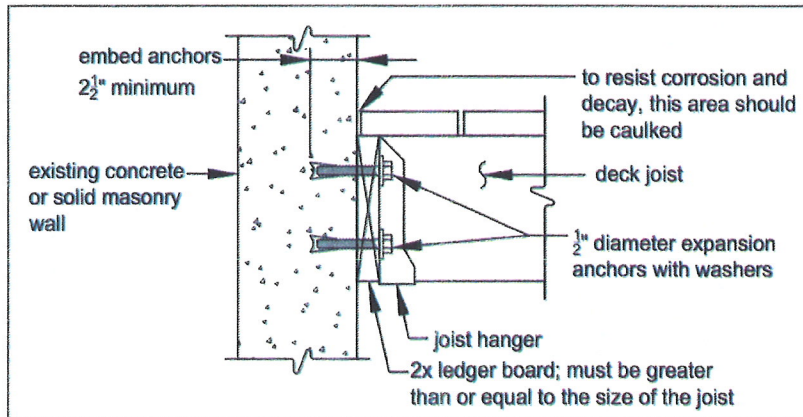
*Risers shall have a uniform height in any one flight of stairs.
*Treads shall have a uniform run and tread depth in any one flight of stairs.
max 1" nosing

DATE:
JANUARY 2016'

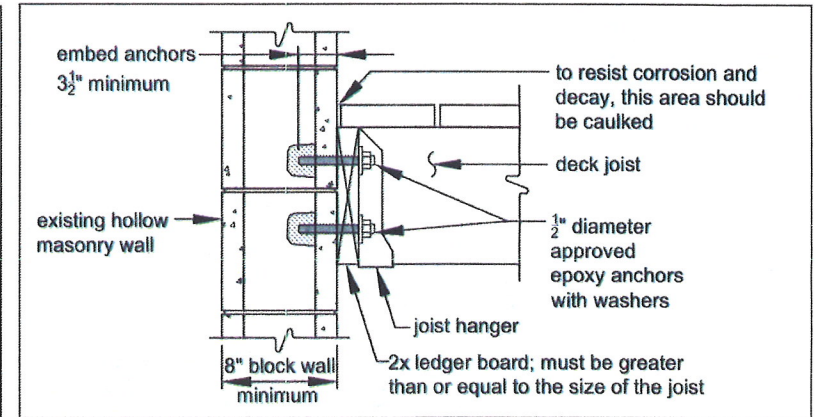
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9-3d

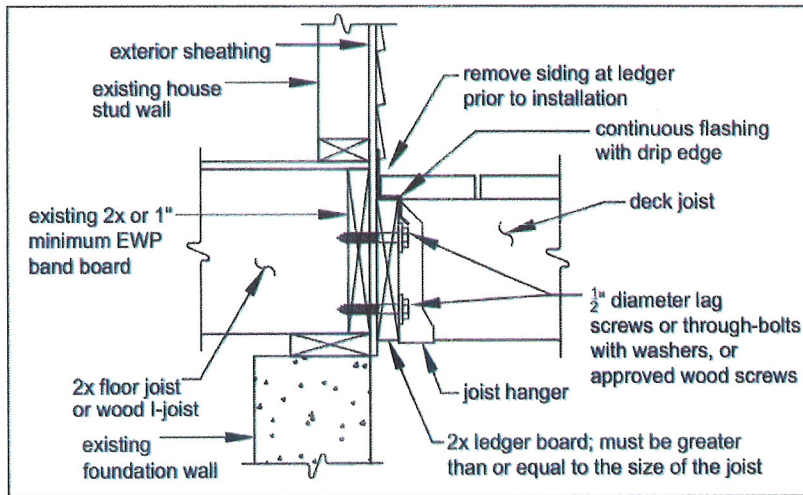
LEDGER BOARD ATTACHMENT



Attachment of Ledger Board to Foundation Wall (Concrete or Solid Masonry)

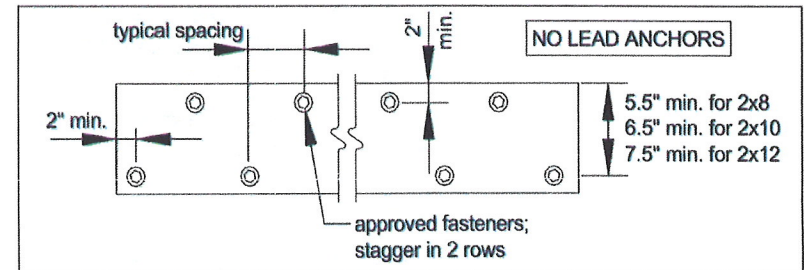


Attachment of Ledger Board to Foundation Wall (Hollow Masonry)

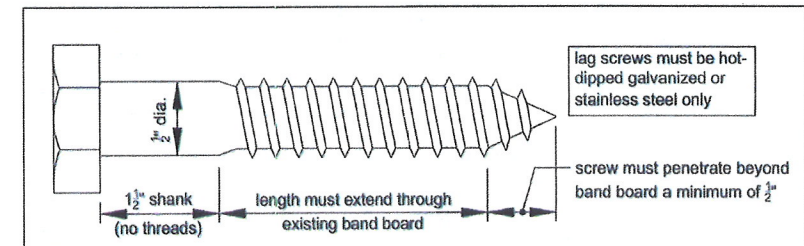


General Attachment of Ledger Board to House Structure

LEDGER BOARD FASTENER SPACING



DO NOT SECURE INTO BRICK VENEER ALONE.



DECK LEDGER TO HOUSE ATTACHMENT – LAG BOLT SPACING (SEE DIAGRAMS)

LAG BOLT SIZE	JOIST SPAN			
	Up to 1.8m (6'-0")	2.4m (8'-0")	3.0m (10'-0")	3.6m (12'-0")
12.7mm (1/2")	812mm (32"o.c.)	400mm (16"o.c.)	400mm (16"o.c.)	300mm (12"o.c.)
Equivalent 16" o.c. Joist Spacing	Every Other Joist Space	Every Joist Space	Every Joist Space	Each Joist Space with Two Every Other Space
9.5mm (3/8")	812mm (24"o.c.)	300mm (12"o.c.)	300mm (12"o.c.)	200mm (8"o.c.)
Equivalent 16" o.c. Joist Spacing	Two Every Third Joist Space	Each Joist Space with Two Every Other Space	Each Joist Space with Two Every Other Space	Two Each Joist Space Three Every Other Space



BUILDING DEPARTMENT

Deck Elevations and Details

DATE: JANUARY 2016

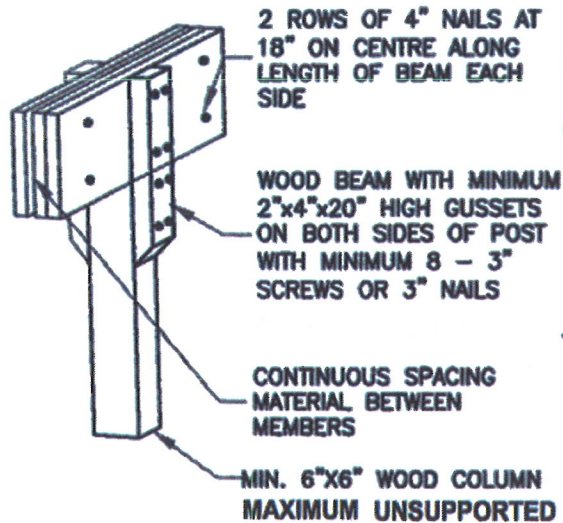
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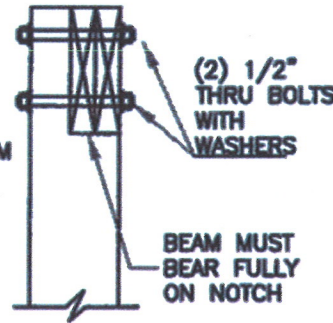
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WOOD BEAM TO POST JUNCTION OPTIONS

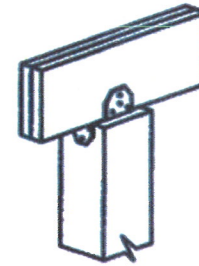
OPTION B
BEAM SITTING
ON TOP OF POST



OPTION C
BEAM SITTING
ON NOTCHED POST

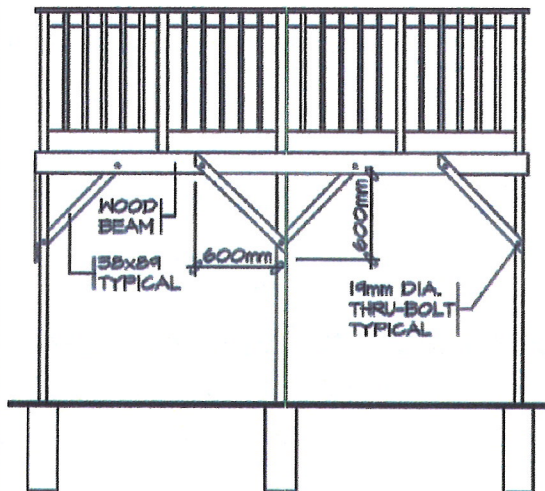


OPTION D
BEAM SITTING
ON POST CAP

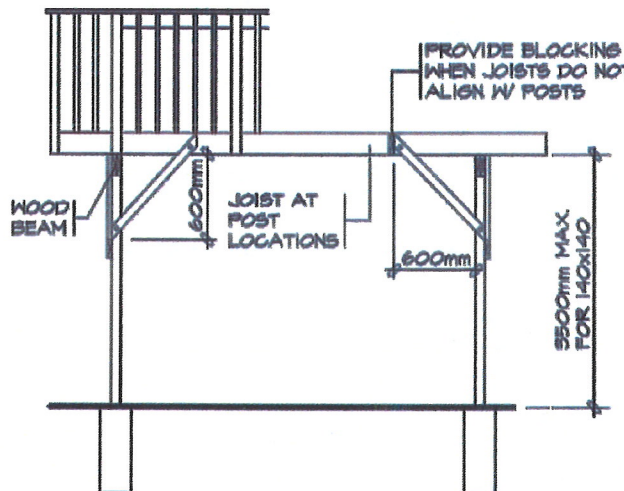


NOTE: BEAM SPLICES MUST OCCUR OVER SUPPORTS

SECTION 'B'



BRACING PARALLEL TO BEAM



BRACING PERPENDICULAR TO BEAM

DECKS GREATER THEN 24" ABOVE GRADE SHALL BE PROVIDED WITH LATERAL BRACING TO ENSURE DECK STABILITY

DECK INSPECTION

Div. C Article 1.3.5.3. of the 2012 Building Code requires a site inspection within 2 business days (5 days for septic system related inspections) of receipt of notification. However, the Building Services Department endeavors to provide next-day inspections if your request is received before 4:30 p.m. Monday – Friday, except holidays.

Required Inspections

- Deck footing: **Before** pouring concrete for foundations.
- Structural framing inspection:
 - If underside of deck is less than 3'-0" above ground, call for framing inspection before deck boards are installed.
- Deck final inspection: **After** the deck is completed.
- Additional inspections as directed by our building inspector.

Booking Inspections

226-909-0668

Please supply **permit number**, address, and name of permit holder.