TECHNICAL BULLETIN
Planning & Development Services
Building Inspections Division

TOPIC: Patio Cover / Pergola / Carport / Arbor

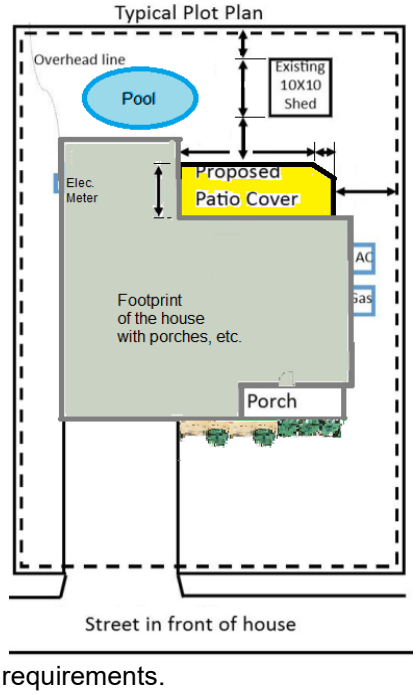
PERMIT REQUIREMENTS

A Building Permit is required to construct, repair, or alter an attached or detached patio cover, pergola, carport, etc. regardless of the size. We encourage you to check with the Planning Department before permit submittal.

- The owner, a contractor, or an authorized agent can submit the permit.
- All plans must comply with the 2021 International Residential Code (IRC), 2020 National Electrical Code (NEC), and the Unified Development Code (UDC) for building material and height requirements, setbacks, and construction methods.
- All permit applications are submitted and processed online Login (https://ap.arlingtontx.gov). Ensure you have all the documents listed below before starting the application process.
- The building permit must be issued and posted at the job site before work can start.
- All contractors must be registered to work in the City of Arlington.

MINIMUM SUBMITTAL REQUIREMENTS

1) **Provide a plot plan / plat survey/site plan and include**:
   - ☐ The size of the patio cover/carport/arbor (width, length, and height)
   - ☐ Location of the patio cover/carport/Arbor (distance from the property lines)
   - ☐ Location of services – gas & electrical (overhead lines & service drop)
   - ☐ Distance from all existing structures to the proposed cover, such as a shed, pool, retaining walls, etc.



2) **Provide construction details/drawings to include:**
   - ☐ Elevations and exterior side views of the structure with dimensions
   - ☐ Roofing material, roof pitch, and height clearance under the cover.
   - ☐ Footing/foundation plans and details with the method of attachment.
   - ☐ Method of attaching proposed structure to existing structure and footing,
   - ☐ Supporting posts size, material, and spacing
   - ☐ Size, material, and spacing of joists, rafters, and beams.
   - ☐ Notate on plans if any electrical or plumbing will be installed. for example, ceiling fans, switches, outlets, sinks, gas appliances, etc.

3) **Texas Licensed Engineer drawings are required If:**
   - ☐ Construction deviates from conventional light-frame wood construction requirements.
   - ☐ The roof of the structure will be occupied. For example, the top of the cover is used as a balcony.
   - ☐ The rafter span exceeds 22'-0" or the beam span exceeds 14'-6".
   - ☐ The structure has a tile or concrete roof covering.
   - ☐ The structure has support posts/columns that exceed 14 feet in height.
   - ☐ The structure is metal/steel frame, concrete buildings, and concrete or concrete block walls.

Special Note: Some subdivisions require that you submit a letter of approval from the homeowner's association or town architect at the time of building permit application.

INSPECTIONS

A typical patio cover/carport project will require the following inspections:

Footings: Footing inspections shall be made after holes are dug, any reinforcing steel is in place/forms erected, and before placing concrete

Framing Inspection: Inspection of the roof, truss/ ledger attachment, rafter/joists, beams, and hangers before any finished ceiling is applied. If electricity is being installed for the patio cover/carport, a rough electric inspection should be called at the same time as the framing inspection.

Final: Inspection made AFTER the patio cover is completed, including any final electrical.

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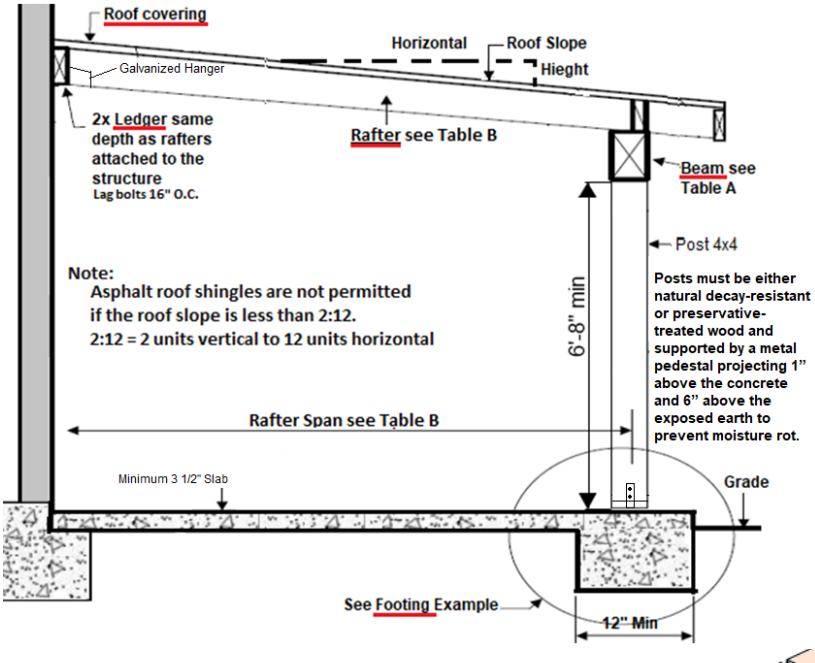
NOTES

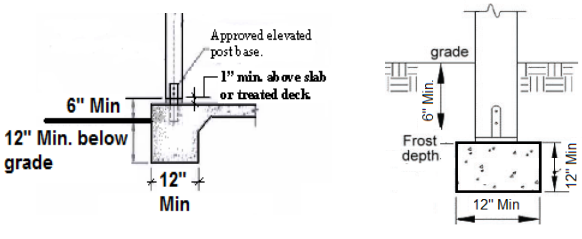
- Patio cover, including overhang, cannot be located in the Building/Zoning setback(s) or easements.
- The minimum depth of footing(s) is 12” below the frost line; the City of Arlington frost line is 6”.
- Posts must be attached with suitable anchors and brackets.
- The patio cover cannot be attached to manufactured homes.
- Many residential properties are located within a subdivision with a homeowner’s association. The City does not enforce deed restrictions and covenants. Contact your HOA to ensure you can build the structure.

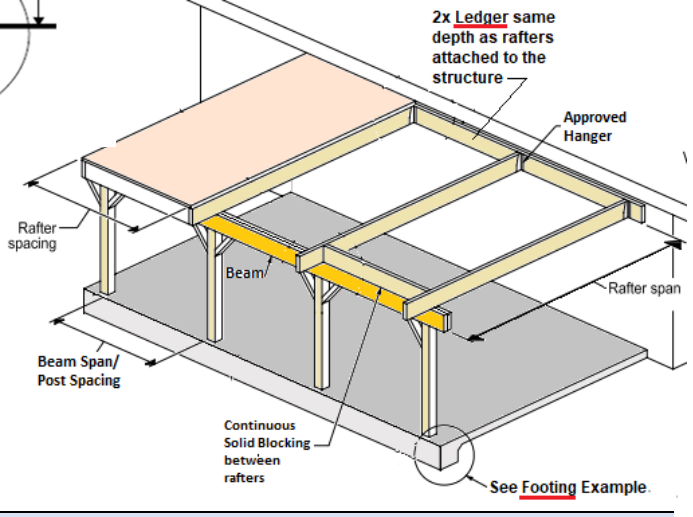
2021 IRC MINIMUM DESIGN REQUIREMENTS/ EXAMPLES



DESIGN REQUIREMENTS	
Live load	10PSF, Table R301.5
Deflection	L/120, Table R301.7 footnote c
Footings/Pier	Minimum 12”x 12”x18” depth, Figure R403.1.3 (1)
Beam Table	Per R602.7(3) page 6-18
Rafters	Per R802.4.1(1) page 8-3
Column	4x4 minimum, R407

Footing Examples





The tables below are for reference only. Keep in mind that these are minimums for the spacing indicated.

TABLE A

Maximum BEAM Span - 2021 IRC Table R602.7(3) used. (Southern Pine)

Beam Size (Inches) ↓	Max Span of Beam Depth of Porch/Rafter span **less than 8’-0”**	Max Span of Beam Depth of Porch/Rafter span **8’-0” - 14’-0”**
(2)-2X6	7’-6”	5’-8”
(2)-2X8	10’-1”	7’-7”
(2)-2X10	12’-4”	9‘-4”
(2)-2X12	14’-4”	10’-10”

TABLE B

Rafter Spacing (Inch on Center)	Maximum RAFTER Span					
	Species #2	2x4	2x6	2x8	2x10	2x12
12” O.C.	Western Cedar	8’-1”	12’-3”	15’-7”	19’-1”	22’-1”
	S. Y. Pine	8’-7”	12’-11”	16’-4”	19’-5”	22’-10”
16” O.C.	Western Cedar	7’-1”	10’-8”	13’-6”	16’-6”	19’-2”
	S. Y. Pine	7’-6”	11’-2”	14’-2”	16’-10”	19’-10”
24” O.C.	Western Cedar	5’-11”	8’-9”	11’-0”	11’-6”	15’-7”
	S. Y. Pine	6’-1”	9’-2”	11’-7”	13’-9”	16’-2”