

# TUSTIN...



Proud of its Heritage, Preparing for its Future...

Revised August 2013

## USER GUIDE FOR THE INSTALLATION OF PATIO COVERS AND GAZEBOS

### PURPOSE

This user guide describes the City of Tustin's requirements regarding construction of patio covers and gazebos. The guide is also designed to help you anticipate the procedures you will need to follow when you decide to build a patio cover or gazebo.

### DEFINITIONS

Accessory Structure – A secondary structure whose use is incidental to that of the primary residence, such as a patio cover, gazebo or porch.

Front Yard – A yard extending across the full width of a lot, the depth of which is measured from the front property line or the lot to the nearest line of a structure.

Gazebo – A detached accessory structure which is open all sides with a solid or trellis type roof.

Patio cover – Patio covers are one-story structures not exceeding 12 feet in height. Enclosure walls may have any configuration, provided the open area of the longer wall and one additional wall is equal to at least 65 percent of the area below a minimum of 6'-8" of each wall, measured from the floor. Openings may be enclosed with insect screening or plastic not more than 0.125 inches in thickness.

Patio covers may be detached or attached to other buildings as accessories to Group M; Group R, Division 3; or to single dwelling units in Group R, Division 1 Occupancies. Patio covers shall be used only for recreational, outdoor living purposes and not as carports, garages, storage rooms or habitable rooms.

Rear Yard – A yard extending across the full width of a lot and measured between the rear property line of the lot to the nearest line of a structure.

Side Yard – A yard between the side property line of the lot and the nearest side line of a structure, extending from the front yard setback line the full depth of the lot to the rear yard setback line.

Variance – A special approval which grants a property owner relief from provisions of the Zoning Ordinance when specific findings can be made and justified by the Planning Commission.

Yard – An unoccupied open space unobstructed from the ground upward within which structures must not be located except as permitted in the applicable City Zoning District.

Zoning District – A specific geographical area of a City regulated with uniform development standards and requirements.

### SETBACK REQUIREMENTS

Patio covers and gazebos located within 5-ft of a property line shall be protected with materials approved for 1 hour fire resistive construction, such as a stucco wall on the side facing the property line; this wall shall extend to the roof sheathing with no openings facing the property line.

Eave Projection – eave projected within 5-ft of a property line shall be protected with one-hour construction on the underside of eave.

Patio Cover – Patio covers that will be attached to the house must maintain the front, side and rear setbacks as specified in the Zoning District Regulations.

Gazebos – Gazebos must be a minimum of 10 feet away from all other structures on the same parcel. Gazebos are an accessory structure and must maintain the front side and rear setbacks as specified in the Zoning District Regulations.

If the roof area is 120 sq. ft. or more, minimum setback is 5-ft but may be greater depending on the Zoning District Regulations.

### CONSTRUCTION REQUIREMENTS

The following notes, tables and details are the standard requirements for construction of patio covers, gazebos and porches in the City of Tustin.

## BUILDING PERMIT AND DESIGN REVIEW REQUIREMENTS

As part of the plan check process for obtaining a building permit, planning staff will complete Design Review of your project concurrent with the building division plan check. The following plans and information are needed by the Department of Community Development:

1. Patio enclosures are considered exterior spaces. All finishes, appliances and electrical, mechanical and plumbing work shall be approved for exterior locations.
2. House windows required for light and ventilation may open into a patio structure.
3. A patio structure shall be unenclosed if exterior openings are serving as emergency egress or rescue openings from sleeping rooms.
4. A patio cover may be supported on a concrete slab on grade without footings, provided the slab is not less than 4" thick and further provided that the columns do not support live and dead loads in excess of 750 pounds per column.
5. Lightweight roof design is based on 5 PSF dead load and 10 PSF live load. Lattice and aluminum roofs would be included in this category.
6. Solid roof design is based on 10 PSF dead load and 10 PSF live load. Shake, shingle and built-up roofs would be included in this category.
7. All standard tables are on Douglas Fir/Larch #2 or better. For Hem Fir #2 and Redwood #2 the spans shall be reduced by 20%. All lumber must be grade marked.
8. Concrete shall be type V cement and shall reach a minimum compressive strength of 2500 PSI, at 28 days.
9. Approved plans stamped by the Building Division shall be kept on the job site at all times during construction.

### PRECAUTIONS

1. Prior to constructing a patio cover, gazebo or porch, you should request a verification from the Tustin Community Development Department of all yard setbacks and building code requirements. Requests should be submitted to the Department with a sketch of the boundary lines on the property and the structure; include dimensions of yard setbacks.
2. If a contractor is doing the work: Verify that a building permit was obtained; be sure the contractor has a current contractor's license, Workers Compensation Insurance and a city business license.
3. If you live in an area with a Homeowner's Association, the Association may require you to obtain their approval and signature before you apply for a City building permit. Please verify whether their approval is necessary prior to submitting plans to the city for approval.

1. A completed permit application with required fees.
2. Homeowners Association approval if applicable.
3. Four copies of a plot plan with the following information noted as required:
  - a. Name of property owner.
  - b. Street address and Assessors Parcel Number of property involved.
  - c. Lot dimensions, boundary lines and any easements on the property.
  - d. Yard setbacks, dimensions and location of proposed additions and existing structures.
  - e. Maintain light and ventilation for the existing interior rooms adjacent to the new patio cover addition: Provide an openable area between the adjoining room and the patio cover of not less than one-tenth of the floor area of the interior room but not less than 20 square feet. The minimum openable area to the outdoors shall be based upon the total floor area being ventilated.
  - f. Elevations showing height, color, roof pitch, materials and types of details (e.g. windows, doors, if any) of existing structures and proposed addition.
  - g. The location, height, type and intensity of exterior lighting, if any.
  - h. Foundation and construction design specifications, as required by the Building Code, (i.e. height, footing details, reinforcement and engineering calculations).

If all development standards are satisfied and complete information provided, permits can usually be issued over the counter.

**SUMMARY OF PATIO COVER SETBACKS <sup>(1)</sup>**

<u>Zoning District or Specific Plan</u>	<u>X=min. side yard setback</u>	<u>Y=min. rear yard setback</u>
Residential Estate (E-4)	10% of lot width	20% of lot depth
Single Family Residential (R-1)	5' (interior) 10' (corner)*	5'***
Duplex Residential (R-2)		
Single-Family Development	5' (interior) 10' (corner)*	5'***
Duplex Development	5' (interior) 10' (corner)*	10'
Multi-Family Residential (R-3)	5' (interior) 10' (corner)*	10'
Suburban Residential (R-4)	5' (interior) 10' (corner)*	25'
Tustin Meadows Planned Community	3' (interior)* 15' from curb face on corner lots 0' if adjacent to permanent open space	3' (interior)* 15' from curb face on corner lots 0' if adjacent to permanent open space
Peppertree & Laurelwood Planned Communities	3 with max. 7½' height***	3'***
East Tustin Phase I Planned Community	Contact Community Development For Zoning Restrictions	Contact Community Development For Zoning Restrictions
East Tustin Specific Plan	Contact Community Development For Zoning Restrictions	Contact Community Development For Zoning Restrictions
<hr/>		
Notes		

(1) This chart is only a summary and there may be additional requirements in the Zoning Ordinance or CC&R's of the Homeowners Association.

\* (interior) = distance from interior property line; (corner) = distance from corner property line.

\*\* Provided a minimum of 1,000 square feet of open space is maintained on the rear 1/3 of the lot.

\*\*\* Provided the size is no larger than 50% of existing open space on the lot.

**CITY OF TUSTIN  
STANDARD PATIO COVER**

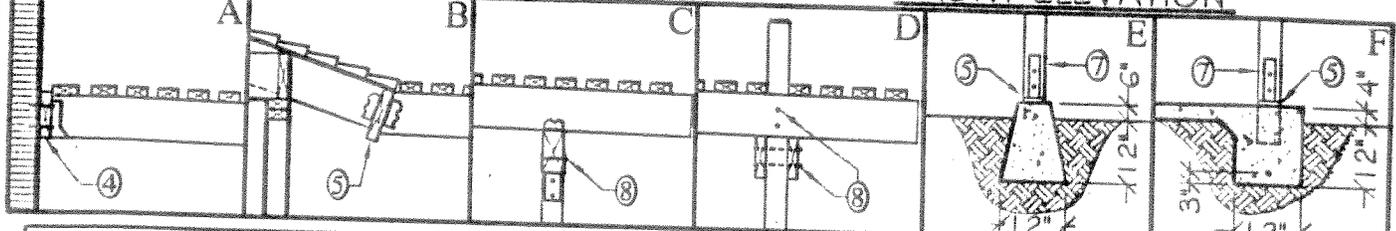
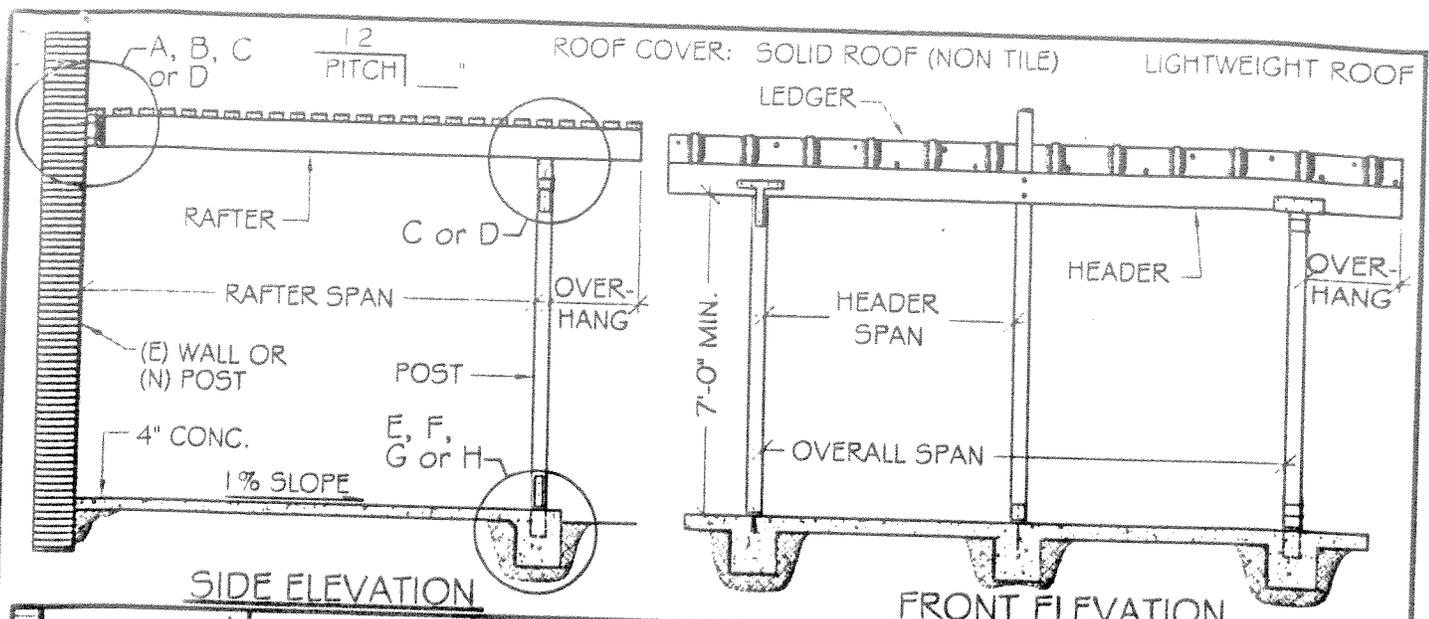
**OWNER:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

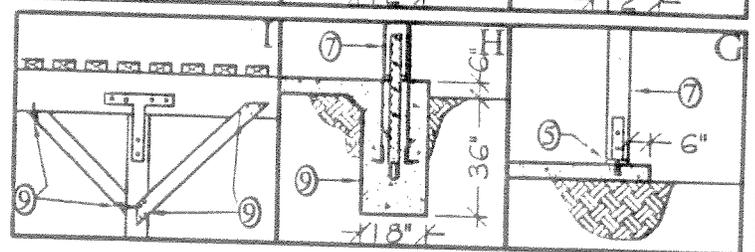
**PATIO COVER SIZE/DESCRIPTION:** \_\_\_\_\_

**REQUIREMENTS**

1. **HEADER:** Headers shall be \_\_\_\_\_ single header/ double header (**details C, D, I**).  
The overhang is \_\_\_\_\_ (maximum 1/3 of span).
2. **RAFTERS:** Rafters shall be single/double \_\_\_\_\_ at \_\_\_\_\_ on center (**see tables**).
3. **ROOF SHEATHING:** Sheathing shall be solid \_\_\_\_\_ with a \_\_\_\_/12 pitch and \_\_\_\_\_ finish material or \_\_\_\_\_ lattice self spaced. If two story and bedroom windows open over a lightweight roof, a 3' wide "CATWALK" capable of supporting 40lbs per square foot must be provided under the windows for egress purposes.
4. **LEDGER:** Ledger shall be a \_\_\_\_\_ mounted on existing wall with 3/8" X 5" lag bolts at 16" on center staggered (**detail A**).
5. **FASCIA:** Existing fascias, if used as a ledger, must be attached to the existing rafters with metal framing anchors on each side of each rafter (**detail B**). Allowed with lightweight roof only, not exceeding 14' span.
6. **FOUNDATION:** Minimum footing size is 12" x 12" x 12" (**details E, F**). Post base shall be H-strap type with non-corrosive base plates. Bases must be embedded into footing a minimum of 7". **Exception:** Maximum allowable load for post on slab is 750 lbs per post. For post on slab the base shall be anchored to slab with a 3/8" x 3" expansion bolt (**detail G**).
7. **POSTS:** Posts shall be \_\_\_\_\_ (min 4x4 or freestanding 6x6), spaced \_\_\_\_\_ on center. The base plate shall project at least 6" above exposed earth and at least 1" above concrete.
8. **CONNECTIONS:**
  - a. Joist to ledger - metal joist hanger or solid blocking
  - b. Joist to header - metal hanger, solid blocking or metal framing anchor on each side of rafters
  - c. Header to post - approved metal post cap, 6"x6"x1"x1/8" galvanized "T" or "angle" each side and through bolted, for 2x doubled built up connectors use (2)1/2"x7" machine bolts with flat washer each side, 2" edge distance.
9. **FREESTANDING:** Freestanding patio footings shall be 18"x36" and have a minimum of (4) PA 28s at each post (6x6 min), one on each side (**detail H**). Cross bracing shall be installed at each post (**detail I**). Cross bracing shall be either (2) 2x braces with (4) 16d nails or 4x bracing with (2) lag screws at each end. All bracing shall be at a maximum 45° and have a minimum length of 24".



MAXIMUM HEADER SPANS					
SIZE	SOLID ROOF	LT. WT. ROOF	SIZE (2)	SOLID ROOF	LT. WT. ROOF
4X4	5'-9"	6'-4"	2X4	5'-1"	5'-1"
4X6	9'-1"	10'-0"	2X6	8'-1"	9'-4"
4X8	12'-0"	13'-3"	2X8	10'-3"	12'-4"
4X10	15'-4"	16'-11"	2X10	13'-7"	15'-8"
4X12	18'-8"	20'-6"	2X12	16'-6"	19'-1"
6X6	10'-4"	11'-5"	3X6	10'-5"	12'-8"
6X8	14'-2"	15'-7"	3X8	13'-9"	15'-11"
6X10	17'-11"	19'-9"	3X10	17'-7"	22'-3"



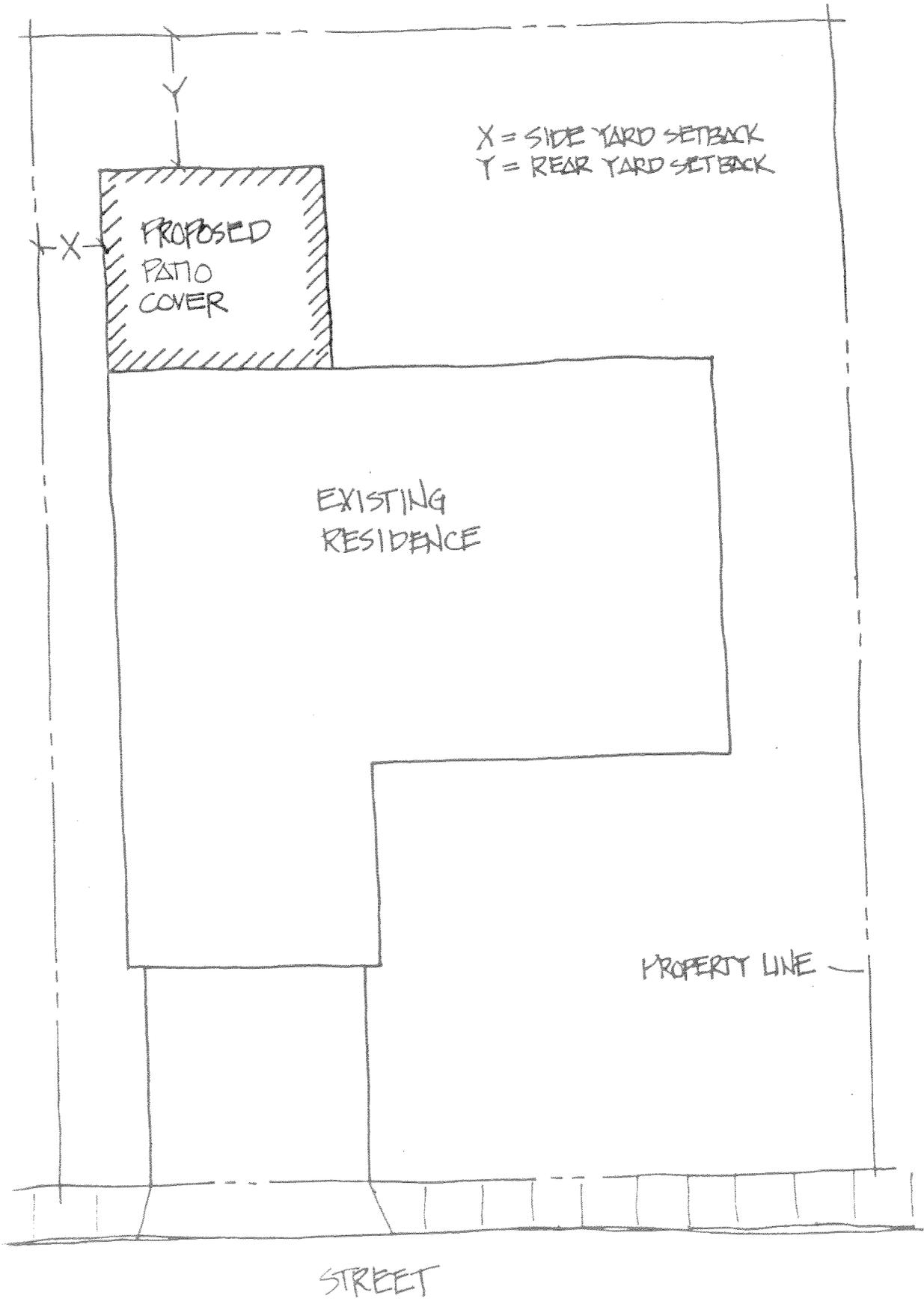
Douglas Fir #2, Redwood #1 and Hem Fir #1 or better use Tables below. For Redwood #2 and Hem Fir #2 reduce spans by 20%.

SIZE	MAXIMUM RAFTER SPANS FOR #2 DOUGLAS FIR (#2 REDWOOD OR #2 HEMFIR - REDUCE BY 20%)													
	LIGHTWEIGHT ROOF							SOLID ROOF						
	SPACING							SPACING						
2X4	12'-8"	11'-6"	10'-0"	7'-11"	7'-7"	6'-11"	6'-5"	6'-1"	10'-0"	9'-1"	7'-11"	7'-2"	6'-11"	6'-3"
2X6	19'-11"	18'-1"	15'-9"	12'-6"	12'-1"	10'-11"	10'-1"	9'-6"	15'-9"	13'-10"	12'-6"	11'-4"	10'-11"	9'-11"
2X8	26'-2"	23'-10"	20'-10"	16'-6"	15'-10"	14'-5"	13'-4"	12'-7"	20'-9"	18'-10"	16'-6"	14'-11"	14'-5"	13'-11"
2X10			26'-6"	20'-11"	20'-2"	18'-4"	17'-0"	16'-0"	26'-5"	24'-0"	20'-11"	19'-0"	18'-4"	16'-7"
4X4			11'-7"	10'-6"	10'-1"	9'-2"	8'-6"	8'-0"	13'-3"	12'-1"	10'-6"	9'-7"	9'-2"	8'-4"
4X6			18'-2"	16'-6"	15'-10"	14'-5"	13'-4"	12'-7"	20'-9"	18'-10"	16'-6"	14'-11"	14'-5"	13'-1"
4X8			24'-1"	21'-10"	21'-0"	19'-1"	17'-9"	16'-3"	27'-7"	25'-1"	21'-10"	19'-10"	19'-1"	17'-4"



PATIO COVERS AND TRELLIS  
 DESIGN GUIDE  
 COMMUNITY DEVELOPMENT DEPARTMENT  
 300 Centennial Way, Tustin, CA 92780

Scale: 1" = 50"  
 Date: 01/14/08  
 Sheet: 1 OF 1  
 Drawn By: A.H.  
 Checked By: B.J.



X = SIDE YARD SETBACK  
Y = REAR YARD SETBACK

PROPOSED  
PATIO  
COVER

EXISTING  
RESIDENCE

PROPERTY LINE

STREET