

# Design Guidelines for Residential Accessory Structures



**CARROLLTON**  
TEXAS

Development Services  
972-466-3225 • [cityofcarrollton.com](http://cityofcarrollton.com)



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# Purpose

The purpose of this document is to provide guidance to the citizens of Carrollton to achieve well-designed projects that enhance the community's overall value and appearance. An important objective of the City of Carrollton is to improve the quality of life in residential neighborhoods.

This manual is intended to help the citizens of Carrollton accomplish this objective by ensuring that additions to existing homes are of high architectural quality; are compatible in mass, scale, and other design features with surrounding development; and preserve and contribute to the unique character of established neighborhoods.

These guidelines are in addition to all applicable development standards in the Zoning Ordinance. It is the goal of these guidelines to encourage creative solutions and eclectic architectural styles consistent with the overall intent of compatibility with the neighborhood. City staff in the Development Services Department will work closely with the project applicant to come to a mutually beneficial solution.





# Design Objectives

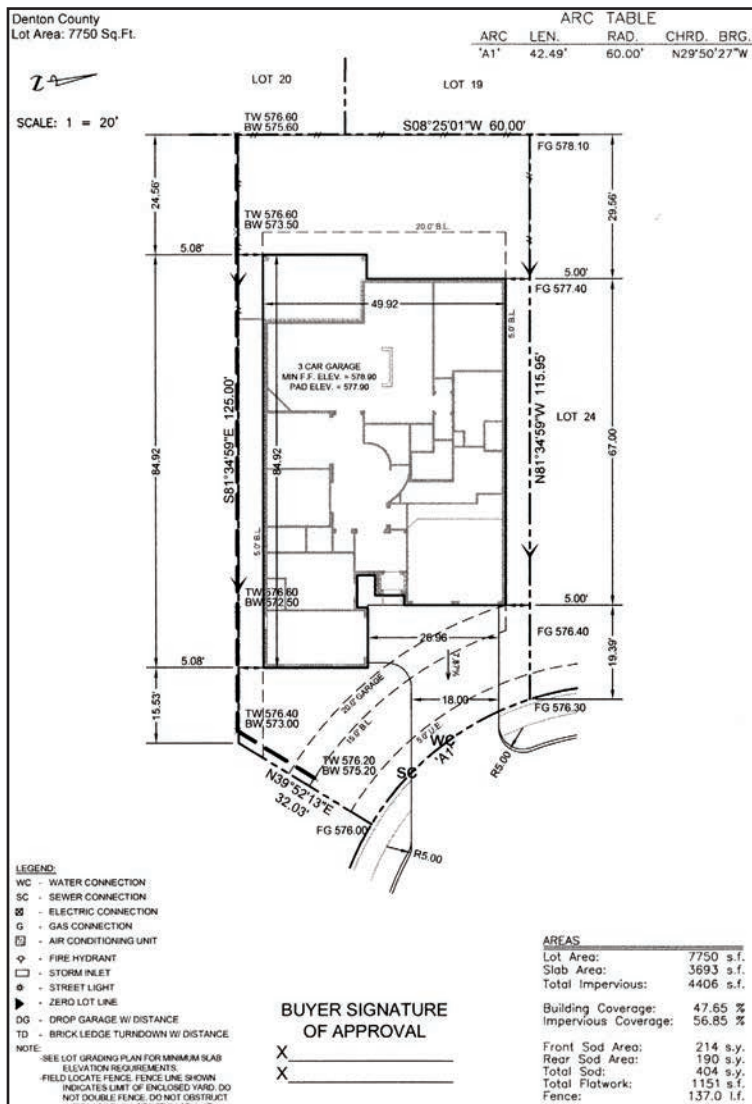
This manual establishes design principles for single-family projects. It promotes efficient design and development of residential properties in the City of Carrollton. This manual should direct and encourage homeowners in the processes of getting required permits through the City. It provides the “how to” of designing better built outcomes. These principles are intended to promote and protect the public health, safety and general welfare of the community by carrying out the following design objectives:

1. Foster project designs that create and enhance a sense of community and neighborhood.
2. Be respectful of and create designs that reinforce the relationship between the private space of a residence and the public appearance of the neighborhood.
3. Create neighborhoods of superior architectural and visual interest.
4. Ensure community longevity by designing projects and neighborhoods that will endure over time.
5. Consider and respond to the relationship and context of adjacent properties.
6. Encourage the use of landscaping to frame, soften or embellish the quality of residential properties.



# Permitting Process

There are a wide array of home improvement projects that are required to be permitted. Please check the City of Carrollton website or call the Development Services Department before starting any home improvement project.



This is an example of a plot plan or property survey that is required to be submitted with an application for all residential permits.

**\*Any contractor that is used must be registered in the City of Carrollton. Registration is free.**

**\*\* The City of Carrollton has a Minor Home Repair Program which provides financial assistance to qualified homeowners. For more information, please call the Community Development Department at 972-466-4299.**

Applications for any home improvement project may be found on the City of Carrollton website or inside City Hall in the Development Services Department.

For more detailed information, please contact the Development Services Department at 972-466-3225.

## Application Submittal Requirements:

1. A completed application.
  2. Two copies of a site plan or Property Survey of the project property with dimensions indicating the location of the accessory structure on the property.
- A Property Survey of your property should be one of the documents found in the mortgage papers for your home.**
3. Two copies of plans or drawings with dimensions indicating how the structure will be constructed and anchored. The plans should include materials used and spacing of framing members.
  4. A permit must be obtained prior to construction and must remain posted at the work site until the approved Final Inspection has been completed and the project is considered complete.
  5. All accessory structures must be set back at least 3 feet from any common (shared) property line.



# Accessory Structures

## A. Carports

A permit is required for the installation of carports in residential zoning districts.

1. A carport shall remain entirely open on at least two sides and there shall be no enclosed uses above the carport.
2. The support posts may rest upon existing concrete and be properly anchored thereto or be supported by concrete piers 12" in diameter and 18" deep or larger. The posts may be anchored to the top of the piers or be embedded a minimum of 6" into the pier. Proper protection from decay must be provided.
3. Setbacks for carports in front and side yards are significantly more restrictive than carports in rear yards.
4. The roof covering must be rated a class 'C' or better.



**A few individual neighborhoods have zoning which prohibit the use of carports. Please check your specific neighborhood zoning. Also verify with your HOA, if applicable.**



## B. Decks

A permit is required for the installation of decks over 30 inches in height.

### Plan Submittal Requirements:

1. Two copies of a site plan or Property Survey of the project property with dimensions indicating the location of the deck on the property
2. Two copies of a plan with dimensions indicating how the structure will be constructed and anchored. This plan should include materials used and spacing of framing members.
3. Two copies of plans showing the guardrails as required by the International Residential Code. Open handrails or guards with a height of 34" – 38" shall have intermediate rails such that a 4 inch sphere cannot pass through.



The picture to the left is an example of a deck that would not require a permit because it is less than 30" in height.

Refer to page 12 for pool/spa requirements.



## C. Fences

A permit is required for the installation of any new fence or repair to an existing fence if the repair is 20 feet in length or greater.

Fences in rear yards are allowed to be a maximum of 8 feet in height.

Fences in front yards are limited to be a maximum of 3 feet in height.

Fences on corner lots may create a traffic hazard or restrict traffic visibility. Refer to the City of Carrollton website for the visibility ordinance.

Sections of fence parallel with arterial or collector streets shall have their back side (the side with the exposed posts and rails) oriented to the interior of the lot.

### Plan Submittal Requirements:

1. Two copies of a site plan or Property Survey of the project property with dimensions indicating the location of the fence on the property.

Where a fence intersects an arterial screening wall and the height of the fence exceeds the height of the screening wall, the height of the fence shall transition to the height of the screening wall over a distance of 20 feet.



The pictures to the right are examples of fences that are prohibited in residential zoning districts.





## D. Outdoor Kitchens

A permit is required for the installation of outdoor kitchens in residential zoning districts.

**A Residential Dwelling Application is required for this type of project.**

1. The application must list a licensed and registered plumber and electrician.
2. Two copies of a site plan or Property Survey of the project property with dimensions indicating the location of the outdoor kitchen on the property.
3. All joists and rafters shall be sized to comply with the Span Tables listed in the current International Residential Code.
4. The sides of the outdoor kitchen shall remain entirely open.





## E. Patio Covers

A permit is required for the installation of patio covers in residential zoning districts.

1. The support posts may rest upon existing concrete and be properly anchored thereto or they may be supported by concrete piers 12" in diameter and 18" deep or larger. The posts may be anchored to the top of the piers or be embedded a minimum of 6" into the pier. Proper protection from decay shall be provided.
2. All joists and rafters must be sized to comply with the span tables listed in the current International Residential Code.
3. If the roof is covered, the roof covering must be rated a class 'C' or better.
4. The sides of the covered patio shall remain entirely open.





## F. Sunrooms

A permit is required for the installation of sun rooms in residential zoning districts.

**A Residential Dwelling Application is required for this type of project.**

### Plan Submittal Requirements:

1. Two copies of a site plan or Property Survey of the project property with dimensions indicating the location of the sunroom on the property.
2. Two sets of plans with dimensions indicating how the structure will be constructed and anchored. This plan should include materials used and spacing of framing members.
3. The foundation shall be constructed in compliance with the current International Residential Building Code.
4. All glass windows in the sunroom must be safety glazed in accordance with the current International Residential Building Code.





## G. Pergolas/Arbors/Gazebos

A permit is required for the installation of pergolas/arbors/gazebo in residential zoning districts.

1. Pergolas/arbors/gazebo under 400 square feet not used for human occupancy may be placed on the ground and anchored to a 3½” concrete slab reinforced with wire mesh or they must be placed on the ground and anchored at all corners. Each corner must be anchored by a system capable of resisting a wind load of 70 mph.
2. The support posts may rest upon existing concrete and be properly anchored thereto or they may be supported by concrete piers 12” in diameter and 18” deep or larger. The posts may be anchored to the top of the piers or may be embedded a minimum of 6” into the pier. Proper protection from decay must be provided.
3. Placement/location of pergolas is limited to rear yards.





## H. Outdoor Fireplaces/Chimneys

A permit is required for the installation of outdoor fireplaces and chimneys.

1. Two copies of a site plan or Property Survey of the project property with dimensions indicating the location of the fireplace on the property.
2. The center of the firebox must be at least 10 feet from any combustible structure on the project property and neighboring properties.
3. Chimneys adjacent or passing through a structure must be a minimum of 3 feet above roof line.
4. Total height is limited to a maximum of 15 feet.



A fire pit/fire bowl does not require a permit unless connected to a gas/electric supply.







## I. Pools & Spas

A permit is required for the installation of any new swimming pool or spa that exceeds 24 inches in depth.

### Plan Submittal Requirements:

1. Two copies of a site plan or Property Survey of your property with dimensions indicating the location of the swimming pool on the property, including setback dimensions to property lines and structures.
2. A pool plan showing depth of pool, dimensions, and indicating the installation of a 3" P-trap on the drain line and a connection to the sanitary sewer.
3. One of these plans must be stamped by the electrical service provider for the area (Oncor, CoServ, etc.) who will check the location of the electrical and gas service lines leading to the meter.

A pool barrier is required for all areas surrounding a swimming pool. This barrier may include an alarm device for any doors that lead from the home into the pool area. An affidavit certifying the installation of such an alarm may be submitted in lieu of an alarm inspection. Additional specific requirements related to pools, spas and pool barriers may be found on the City of Carrollton website.



**Self-contained (no direct plumbing or electrical connections) portable spas with a locking cover do not require a permit.**



## J. Sheds

1. A permit is required for the installation of sheds which are greater than 120 square feet in size.
2. All sheds, whether a permit is or is not required, must be at least 3 feet off of the property line.



The picture above is an example of a shed that would not require a permit because it is less than 120 square feet in size.



Sheds with a floor area in excess of 120 square feet but less than 240 square feet should be constructed with metal, exterior grade wood siding, or with materials and ratios as similar to the main structure as possible.

Sheds with a floor area in excess of 240 square feet but less than 600 square feet shall be constructed with the same percentage and type of materials as the main structure.



Sheds with a floor area in excess of 600 square feet shall be constructed with the same percentage and type of materials as the main building, and shall match the architectural style of the main building as much as possible (including, but not limited to, roof style and pitch, window & door design, height measured at the wall top plate and architectural detailing).



## K. Greenhouses

1. A permit is required for the installation of greenhouses which are greater than 120 square feet in size.
2. All greenhouses must be at least 3 feet off of the property line.



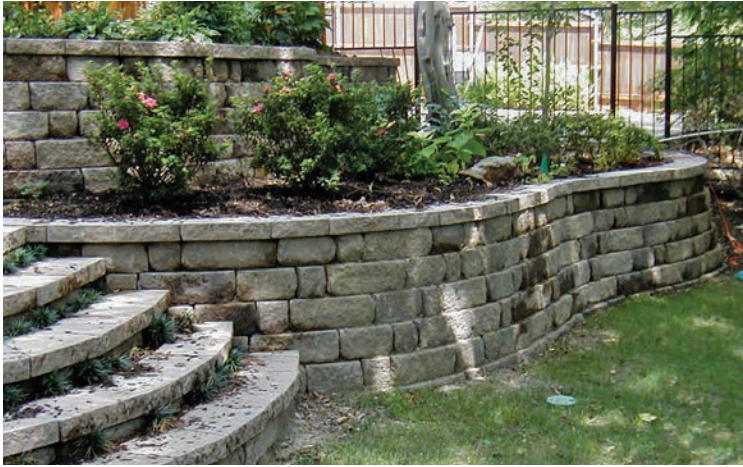
Maximum sizes of greenhouses are not limited in square footage, but are limited to a maximum of 15 feet in height of structure.

Greenhouses under 400 square feet not used for human occupancy should be placed on the ground and anchored to a 3 ½" concrete slab reinforced with wire mesh or be placed on the ground and anchored at all corners. Each corner must be anchored by a system capable of resisting a wind load of 70 mph.



Greenhouses less than 120 square feet in size do not require a permit.





## L. Retaining Walls

A permit is required for the installation of retaining walls over 48 inches in height including the footing.

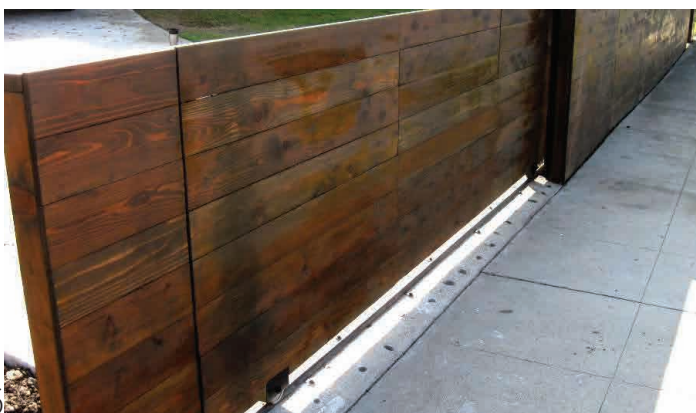
### Plan Submittal Requirements:

1. Two copies of a site plan or Property Survey of the project property with dimensions indicating the location of the retaining wall on the property.
2. The plans must be designed and stamped by an engineer licensed in the state of Texas.
3. Retaining walls that face or have exposure to any public street or thoroughfare shall be veneered with brick or stone.

**\* The City of Carrollton requires a letter from the Engineer who designed the wall stating that the wall was built per the plans that were submitted with the application.**







## M. Driveway Gates

A permit is required for the installation of vehicular gates that cross driveways.

### Plan Submittal Requirements:

Two copies of a site plan or Property Survey of the project property with dimensions indicating the location of the gate on the property

### Gate Requirements:

1. All manually operated gates for residential and commercial driveways shall be a minimum distance of 20 feet from the street or alley pavement edge in order to adequately provide maneuvering off public streets and/or alleys and to avoid stopping in the public street.
2. A gate may be placed on the property line or less than 20 feet from the street/alley edge; if it has a remote electrical opening device in which the gate swings inward or slides parallel to the property line.
3. All electrically operated gates across a driveway will require a separate electrical permit, in addition to a fence permit. Solar operated gates will not require a separate electrical permit, but the mechanism is subject to inspection.
4. No gate shall swing into the city right-of-way.
5. If a fence/gate is to be placed on the street side of a corner lot, a visibility clip may be required. If visibility becomes an issue, then the fence/gate shall be set back according to the visibility stipulations.



# Renewable Energy Systems



## A. Solar Energy Panels

Both building-mounted and ground-mounted solar energy systems shall be allowed as accessory structures, in accordance with the following requirements:

1. Location: Solar energy systems shall be located on the roof of a dwelling unit or detached and allowed as an accessory to the dwelling unit.
2. Height: Ground-mounted solar energy systems shall not exceed 15 feet in height. Roof-mounted solar energy systems are subject to the maximum height limits of the zoning district in which they are located and shall be mounted flush with the existing slope of the roof system.
3. Setback: Ground-mounted solar energy systems shall meet all applicable building setback provisions for accessory structures of the zoning district.
4. Panels shall meet the Fire Code as adopted by the City of Carrollton.
5. All solar energy systems shall be in compliance with the International Green Construction Code (IGCC) or the ICC 700 National Green Building Standard.



## B. Wind Energy Systems (Wind Turbines)

Wind energy systems shall be allowed as accessory structures, in accordance with the requirements of this section.

1. Location: Wind Turbines shall be detached as an accessory structure and not supported by a building.
2. The minimum setback shall not be less than the total height of the system and may not be located in the front yard. The maximum height limit is 36 feet.
3. The maximum diameter of the wind turbine rotor blades (swept area of blades) shall be 15 feet.
4. All systems shall be equipped with automatic over-speed controls to limit the blade rotation speed to within the design limits of the wind energy system
5. Secondary uses (e.g., radio and television receiving antennas, satellite dishes), commercial markings, messages, signs and banners are prohibited, except for warning signage.
6. All wind turbine systems shall be designed and installed as a monopole tower design. Wind Turbines shall be certified or approved by the U.S. Department of Energy and the American Wind Energy Association ([awea.org](http://awea.org)).

**A wind energy system that is out of service for a continuous 180 days will be deemed to have been abandoned.**



7. Restrictive Access or Fencing shall be provided to prevent a potential climbing hazard. All disconnect switches and junction boxes at the bottom of the tower shall be secured to prevent unauthorized access. They shall also be labeled with HIGH VOLTAGE signage.
8. Noise and Vibrations: Refer to Article XXVII in the Zoning Ordinance.
9. The wind generator and tower shall be maintained and finished with a neutral, non-reflective paint color that blends into the surroundings.
10. The system shall be operated so that no disruptive electro-magnetic interference is caused to off-site telecommunications or other similar systems and equipment.
11. Permanent artificial lighting shall not be permitted on the system unless required by the FAA.
12. All wind energy systems shall be in compliance with the International Green Construction Code (IGCC) or the ICC 700 National Green Building Standard.





## C. Rainwater Harvesting Systems

Shall be allowed as accessory structures with the following requirements:

1. Accessory Structures: Rainwater harvesting barrels, tanks and cisterns shall be considered accessory structures, except that they shall not be required to meet the exterior wall standards of accessory structures, and they shall not be counted toward the square footage allotment of accessory structures.
2. Setbacks: No above ground portion of rainwater harvesting systems shall be placed closer to a right-of-way than the building façade.
3. Screening: A rainwater harvesting system shall either be fully screened from view from any street or public right-of-way, placed under ground or shall be integrated into the design of the structure as a compatible architectural element of the structure. To be a compatible architectural element, a rainwater harvest system shall utilize consistent or compatible exterior materials and design elements of the primary structure.
4. Permits: Rainwater harvesting systems with a storage capacity greater than fifty 50 gallons or more shall be subject to the permitting requirements of the Building Inspections Department.
5. Equipment shall be properly maintained to ensure health and safety, including – but not limited to – the regular flushing of debris from the bottom of storage containers and keeping insects and animals out of containers and distribution pipe systems.
6. The system shall not be connected into the domestic or municipal water system.
7. All rain water harvesting systems shall be in compliance with the International Green Construction Code (IGCC) and the ICC 700 National Green Building Standard.

