



HELPING HANDS

A Guide to Permit Document Preparations for Commercial and Residential Building Permits

Welcome!

At the City of Harlingen we recognize that developing in different Cities requires different documentation even when they are governed by the same Building Codes. It is our sincere desire to make those differences as clear and evident as possible to all who desire to develop within the City of Harlingen. In that spirit, we have developed this guide to accompany the checklists for construction documents needed to obtain building permits within the City of Harlingen.

This new system of development goes into effect in Harlingen on October 1, 2004. Therefore, this guide will be a work in progress. The checklists and attached documentation are intended as guidelines, not design tools. Everything included here is subject to change and there may be additional requirements as deemed necessary to ensure the health, safety and welfare of the citizens of Harlingen.

This guide will give a line-by-line description of the items required on the checklists. Commercial guidelines are first, followed by residential guidelines. If there are additional questions not addressed within this guidebook, the contact person expert regarding each section is noted in the following guidelines.

Since this is a work in progress and it is intended to be for the public to use in navigating the course from idea to building, I urge you to give us feedback relating to this guidebook, the checklist and anything in our development process that will make your job easier. This guide was created by all the individuals involved in our development process, but if there are general, overall questions, please feel free to contact me directly.

Sincerely,



Michelle R. Leftwich, AICP
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Table of Contents

Contact Information	1
Commercial Construction Checklist	2
Guide for Commercial Construction	5
Residential Construction Checklist	19
Guide for Residential Construction	20
Appendices	25
Appendix A – Application for Exemption Letter of Determination	
Appendix B – Tree Removal Application	
Appendix C – Setback Illustration	
Appendix D – Site Triangle Illustration	
Appendix E – Parking Illustration	
Appendix F – Typical Wall Section	

CONTACT INFORMATION

If you find you need additional assistance in the various areas of permitting, the following individuals are available to answer questions regarding specific portions of the permitting process.

Building Inspection Department

Located at 502 E. Tyler

Eddie Olvera, Plans Examiner (956) 427-8730

Raul Flores, Chief Building Official (956) 427-8730

Engineering Department

Located at 404 S. 54th Street

Jeff Gilbert, City Engineer (956) 430-6604

jgilbert@myharlingen.us

Fire Department

Located at 3510 E. Grimes Avenue

Frank Garcia, Fire Marshal (956) 427-8814

Health Department

Located at 502 E. Tyler

Dan Serna, Environmental Health Director (956) 427-8812

dserna@myharlingen.us

Planning Department

Located at 502 E. Tyler

Rod Sanchez, City Planner (956) 427-8828

Curtis Hill, Planning & Zoning Manager (956) 427-8727

General Assistance or Assistance in Question Directing

Located at 502 E. Tyler – Planning Department

Michelle Leftwich, Planning Director (956) 427-8727

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CHECKLIST FOR COMMERCIAL CONSTRUCTION

(multifamily projects in excess of two units are considered commercial for permitting purposes)
This checklist is intended as a guideline, not a tool for design and is subject to change and additional requirements as needed to ensure the health, safety and welfare of the citizens of Harlingen.

- DESIGN MUST COMPLY WITH ALL APPLICABLE ADOPTED CODES:
- | | |
|---|--------------------------------------|
| * 2000 International Building Code | * 2000 International Plumbing Code |
| * 2000 International Mechanical Code | * 2002 NEC |
| * 2000 International Gas Code | * 2003 Life Safety 101 Code |
| * 2000 International Fire Prevention Code | * Current City Zoning Ordinance |
| * 1998 Texas Food Establishment Regulations | * Current City Subdivision Ordinance |

All applicable items below must be submitted on FOUR sets of construction plans to make 10 business day permitting time possible. (This allows all departments to begin plan review immediately upon receipt. A minimum of TWO sets will be required, but may not allow the 10 day permit time window.)

10 Day Permit is not guaranteed, but should be accomplished if all submittals as laid out below are submitted and the project is not extraordinarily large.

SITE PLAN:

- _____ Property Legal Description (Lot # Block #, Subdivision Name)
- _____ Property Address
- _____ Is Property Zoned for Intended Use?
- _____ Is Property Subdivided? Or has Letter of Exemption been Processed?
- _____ Vicinity Map Showing Scale and North Arrow
- _____ Removing Trees > 8" Caliper Requires Tree Removal Permit
- _____ 5' Sidewalk Required Along Each Street Frontage
- _____ Zoning District Dividing Line Fence Requirement (if applicable)
- _____ Setback Requirements (by plat, zoning ordinance and site triangle)
- _____ Building Layout with Square Footage
- _____ Parking Lot Layout 9' X 20' with Adequate Backing Room
- _____ If Retail, Show Truck Loading Dock
- _____ Required Landscaping and Trees (8% Commercial /Industrial; 15% Apartments)
- _____ Trash Receptacle Location
- _____ Drainage Plan With:
 - _____ a. Gradient Elevations
 - _____ b. Flow Rates
 - _____ c. Retention/Detention Areas
 - _____ d. Guttering or sloping details
- _____ Any Monument Signs (location/height – if applicable)
- _____ Clear Zones for Driveways/Site Triangle

FLOOR PLAN:

- _____ Asbestos survey and TDOH clearance letter (if applicable)
- _____ Registration Letter from T.D.L.R. for A.D.A. Compliance
- _____ Engineering Required on Buildings 5,000 S.F. or Over
- _____ On All A, I, OR E Occupancies, Engineers' or Architect's Seal Required

- _____ All Areas/Rooms Denoted or Labeled
- _____ All Pertinent Dimensions Shown
- _____ All Door & Window Sizes Shown or Referenced to Schedules
- _____ All Accessory Details and Drawings
 - a. Wall Section Details
 - b. Framing Details (Roof & Wall)
 - c. Engineered Metal Building Drawings (if applicable)
- _____ Energy Conservation Report

IF RETAIL FOOD ESTABLISHMENT ALSO NEED:

- _____ Type of Finish Floor Surface
- _____ Type of Wall Surface
- _____ Type of Food Contact Surface
- _____ Kitchen Equipment Layout Including Storage Areas
- _____ Location of 3-Compartment Sink
- _____ Location of Mop Sink
- _____ Location of Employee Hand Lavatories
- _____ Paper Towel and Soap Dispenser(s) Above All Employee Hand Sinks
- _____ Self-Closing Device on all Bathroom Doors
- _____ In-Direct Drain Connections for 3-Compartment Sink and Ice Machine
- _____ Hot and Cold Water Supply to all Sinks
- _____ Location of Outside Trash Dumpster
- _____ Sneeze Guard Protection (if applicable)
- _____ Food Protection During Display
- _____ Location of Storage Area

FOUNDATION PLAN:

- _____ Dimensions & Details for Construction
- _____ Engineers Seal Required if Building > 5,000 S.F.

ELECTRICAL PLAN:

- _____ Provide Electrical Fixture Plan
- _____ Provide Electrical Panel Schedule
- _____ Engineers Seal Required if Building is > 5,000 S.F.
- _____ Energy Conservation Report on Air-Conditioned Areas

MECHANICAL PLAN:

- _____ A/C Duct Layout
- _____ A/C Equipment Schedule with Size Designation
- _____ Details on Dampers if Required
- _____ Engineers Seal Required if Building is > 5,000 S.F.

PLUMBING PLAN:

- _____ Layout of all Fixtures
- _____ Schematic of Drain/Waste System Layout
- _____ Engineers Seal Required if Building is > 5,000 S.F.

FIRE PROTECTION:

- _____ Designation of all Firewalls or Partitions
- _____ Fire Rating Designation on Doors & Window Assemblies in Fire Rated Walls or Partitions
- _____ Fire Alarm Layout (if required)
- _____ Fire Suppression System Layout (if applicable - sprinklers, stand pipes, aerosol systems, CO2 systems, etc)
- _____ Fire Department Accessibility

GUIDE FOR COMMERCIAL CONSTRUCTION

The following information may be used as a general guide to ensure that all required information is included on the blueprints to avoid delays in receiving your building permit. This section is applicable to new commercial construction as well as additions and remodels.

The City of Harlingen has adopted the following codes to shape development within the city limits:

2000 International Building Code (IBC)
2000 International Mechanical Code (IMC)
2000 International Gas Code (IGC)
2000 International Fire Prevention Code (IFPC)
1998 Texas Food Establishment Regulations
2000 International Plumbing Code (IPC)
2002 National Electric Code (NEC)
2003 Life Safety 101 Code
Zoning Ordinance #97-34
Subdivision Ordinance #01-01

A full copy of most of these codes are available for reference in the Building Inspection Department library located opposite of the permit counter within the Lon C. Hill Building at 502 E. Tyler Avenue

Note: These codes are subject to revision as new codes become available and adopted by Ordinance.

SITE PLAN: Generally, site plans for commercial developments require a professional engineer's seal and signature from a professional engineer registered in the State of Texas. A professional engineer is required in order to assure proper drainage, traffic safety and construction specifications are met. Information on all existing adjacent utilities, rights of way, easements, and other information pertinent to the design of the site is required.

Property Legal Description

Usually can be found on the current tax rolls or referenced on the yearly tax bill. The format is usually Lot, Block, Subdivision (such as Lot 1, Block 3, Moran Estates Subdivision). If it cannot be located by these means, check with the City of Harlingen Planning Department for assistance (956-427-8727).

Property Address

The address is the physical address of a property. If it is a vacant lot, it may not have an assigned address. The Chief Building Official can assign official

addresses that typically consist of a 3 or 4 digit number, direction and street (502 E. Tyler Avenue). (Contact 956-427-8730 for a new address assignment when necessary.)

Is Property Zoned for Intended Use?

Check with the City of Harlingen Planning Department to determine the zoning of the property to determine if the intended land use or activity is permitted on the property (956-427-8727).

Is Property Subdivided? Or has Letter of Exemption been Processed?

The City of Harlingen has had a Subdivision Ordinance since November 1978 governing the splitting or subdividing of property. The City of Harlingen can only issue a building permit on property that has been legally subdivided and recorded at the Cameron County Courthouse.

The Subdivision Ordinance allows in some circumstances, property to be exempt from the Subdivision Ordinance requirements. This is for properties that have been in their current shape or configuration since November 1978 or exceed 5 acres in size. In these cases, a letter of exemption may be applied for through the City of Harlingen Planning Department. A copy of the *Application for Exemption Letter of Determination* is available in Appendix A. Further information can be obtained from the Harlingen Planning Department.

Vicinity Map Showing Scale and North Arrow

This is a map showing the subject property in relation to the rest of the city so staff can determine where the property is located.

Removing Trees > 8" Caliper Requires Tree Removal Permit

In case you plan to remove large "protected" trees from the site as part of your project you will need to pick up an application from the City of Harlingen Planning Department. When you complete the form and return it to the Planning Department with the filing fee the application will be processed within two to three business days. To expedite your plans, you should include a copy of the approved application with your building permit application. A copy of the application is available in Appendix B.

5' Sidewalk Required Along Each Street Frontage

A city ordinance requires the owner or contractor to build a five-foot wide sidewalk in the city right-of-way on commercial projects. It can be built directly behind the curb or further back within the right-of-way and can veer around

obstructions if necessary. The complete specifications can be found in Section 13 of the City of Harlingen Zoning Ordinance.

Zoning District Dividing Line Fence Requirement (if applicable)

Generally if your property is commercially zoned and it is adjacent to a residentially zoned property, the commercial owner is responsible for erecting a solid fence or planting a landscape hedge. The specifications for the buffer can be found in Section 7Bd6 and 7Cc5 of the City of Harlingen Zoning Ordinance.

Setback Requirements (by plat, zoning ordinance and/or site triangle)

The setback is the portion of your lot where one may not erect or construct any building or structure of any kind. Setbacks are measured from the property line including front, rear and sides (see illustration in Appendix C).

Commercially zoned property usually does not have setbacks but there are cases where it may. This may include where a subdivision was platted and recorded with a specific setback requirement, where a commercially zoned property is adjacent to a residentially zoned property, or due to the required sight distance triangle for corner lots (see illustration in Appendix D). In these cases, the setback area must not be built upon, however, the area can be used for parking or required landscaping.

Building Layout with Square Footage

This can be shown on the required site plan which is an overhead view of the entire property with building, parking and landscaping noted on it. This information is necessary to determine the amount of parking spaces required for the proposed building. The building layout should indicate rooms and what they will be used for, as well as, any hallways, and storage areas.

Parking Lot Layout (9'x 20') with Adequate Backing Room

This can also be shown on the required site plan along with the building layout and landscaping. Different land uses require different parking ratios but the minimum size for a parking space is 9' wide by 20' deep. All maneuvering in to and out of the parking space must be accomplished within the property lines of the lot. The normal minimum maneuvering space (backing) is 22 feet. Section 8 of the City of Harlingen Zoning Ordinance has details on parking requirements. (See illustration located in Appendix E).

If Retail, Show Truck Loading Dock

See Section 8.06 of the City of Harlingen Zoning Ordinance for the specifications of the loading dock which is required for any land use where retail sales will occur.

Required Landscaping and Trees (8% Commercial/Industrial; 15% Apartments)

See Section 11 of the City of Harlingen Zoning Ordinance for the specification of the landscaping and tree requirements.

Trash Receptacle Location

The location for trash receptacles should be placed where servicing them is least intrusive to business and traffic. Receptacles should be placed where servicing them allow service trucks to be completely off the public streets and where service trucks can safely maneuver on and off the site.

Drainage Plan:

The site plan must include an engineer's depiction of general drainage conditions.

Gradient Elevations

Provide existing information such as drainage courses, drainage easements, and topographic grades on the National Geodetic Vertical Datum. The project engineer is responsible for providing sufficient grades in and around the site in order to establish existing drainage patterns.

Flow Rates

Calculations are required to be provided that describe a 5-year storm event.

Retention/Detention Areas

Proper drainage design will provide reasonable disposition of storm water runoff without impeding traffic, will consider affect on adjacent properties, and will provide storm sewers as necessary to reduce surface runoff into public right of way. Good engineering practice will be required. Detention basins on larger sites may be required in areas of historic chronic flooding.

Guttering or Sloping Details

Building Code Chapter 8 R801.3 requires that all structures provide adequate drainage systems to prevent rainwater from accumulating against the

foundation. This requires either storm gutters on roof fascia or through landscaping swales to discharge five feet away from foundation. In addition, Zoning Ordinance Section 7.01E required that no overhang discharge water into a neighboring private property.

Any Monument Signs(location/height) if applicable:

Any monument sign proposed must be shown on the site plan in order to demonstrate setback lines are adhered to. The size, height and location must be shown on the site plan.

Clear Zones for Driveways/Site Triangle

Driveways across right of ways shall require a site distance triangle to be placed on the site plan. This will demonstrate that the site distance out of the property is unimpeded. No site obstructions such as landscaping, signs or fences shall be placed within this zone.

The Texas Department of Transportation (TxDOT) has implemented an *Access Management Plan*. On commercial development site plans requesting access onto State roadways coordinating with the local District office during the planning stage will help to prevent undue delays. Contact TxDOT, 1120 E. Highway 77, San Benito, 399-5102. The City Engineering Department can identify which roads are State roadways, but generally include all roads leading into/out of Harlingen such as Tyler, Harrison, Expressway Frontage, Morgan, Ed Carey, Business 77 Sunshine Strip. The engineering contact number is 956-430-6604.

FLOOR PLAN (General design as per the 2000 International Bldg. Code)

Asbestos Survey and Texas Department of Health Clearance Letter (if applicable)

In the case of remodels, as per Texas Department of Health regulations, and asbestos study must be conducted prior to all commercial project remodels regardless of building age. A copy of this study must be provided to the Building Inspection Department prior to issuance of a demolition or remodeling permit. In the event that asbestos containing materials are found and need to be removed, the State Department of Health must be notified 10 days prior to start of removal of any asbestos containing material

Registration Letter from Texas Department of Licensing and Regulations for ADA Compliance

All new construction and additions, plus extensive remodels must meet all ADA/TAS (American with Disabilities Act/Texas Accessibility Standards) rules and regulations. The construction documents must be reviewed by the Texas

Department of Architectural Barriers for compliance (contact 1-800-803-9202) and the Building Inspection Department must receive proof that these documents have been submitted or registered with the state for review. The state assigns an EAB number and supplies a “proof of registration” form. The General Contractor must supply either the EAB number or a copy of the registration form with his submittal documents.

Engineering Required on Buildings 5,000 square feet or Greater

The Engineering Practices Act of the State of Texas requires that all commercial structures 5000 square feet or larger be engineered with respect to their foundation, structure, electrical, plumbing, and mechanical systems.

All A, I or E Occupancies, Engineers’ or Architect’s Seal Required

All Educational, Institutional or Assembly occupancy construction, regardless of size, must be designed and sealed by a professional engineer or architect. This was an amendment to the International Building Code by City Ordinance 02-35. This is to insure that the structures that contain these types of occupancies (schools, hospitals and convalescence homes, or churches) in which large groups of persons are or can be present are designed per Codes as to the safety of the occupants.

All Areas/Rooms Denoted or Labeled

All floor plans are to be as construction documents. These plans must have all the information required so that a proper review can be conducted. Such as the following:

- a. A dimensioned floor plan to determine sizes of rooms, corridors, and accessory areas.
- b. Denote all rooms to determine use of areas.

All Pertinent Dimensions Shown

All dimensions for walls, heights, openings, site boundaries, etc. must be provided or the drawing must be to scale with an accurate scale notated on each sheet of the plans.

All Door & Window Sizes Shown or Referenced to Schedules

Show door and widow schedules denoting sizes to determine emergency access as per Chapter 10 of the International Building Code.

All Accessory Details and Drawings

Can include anchoring, connections, construction details such as header attachments, plate attachments, roof sections, built up roofing details, (parapets, scuppers, etc.)

Wall Section Details

Show wall section details to verify that walls construction complies with separation requirements and fire rated construction as per Chapters 3, 7 and 6 of the International Building Code.

Framing Details (Roof & Wall)

Structure load bearing wall details and section to be included to determine construction type as per Chapters 5 and 6 of the International Building Code. (See typical wall section Exhibit F.)

Engineered Metal Building Drawings (if applicable)

Provide pre-engineered metal building drawings (if applicable) for review to verify that they have been designed to meet minimum wind load requirements (110 mph) for this area.

Energy conservation report

Provide Energy Conservation Report as per the 2000 International Energy Conservation Code detailing insulation factors of wall insulation, ceiling insulation, door and window insulation values, and air conditioning unit and duct “Seer” and “R” values. Information on lighting systems is also requested by the 2000 I.E.C. **This item applies to “air conditioned” areas only.**

IF RETAIL FOOD ESTABLISHMENT ALSO NEED:

(NOTE: The 1998 Edition of the Texas Food Establishment Rules (TFER) may be reviewed on the internet at www.tdh.state.tx.us)

Type of Finish Floor Surface

Make sure that the floor finish meets or exceeds the requirements set forth in the 1998 Edition of the Texas Food Establishment Rules (TFER). You can find this information on page #100 – Section 229.167 (a), (b) & (c) of the TFER.

Type of Wall Finish

Make sure that the type of wall finish meets or exceeds requirements set forth in the 1998 Edition of the Texas Food Establishment Rules (TFER). You can find this information on page #101 Section 229.167 (c) of the TFER.

Type of Food Contact Surface

Make sure that the food contact surfaces are non-porous and easily cleanable and meet or exceed the requirements on page #60 Section 229.165 c) & (d) of the TFER.

Kitchen Equipment Layout Including Storage Areas

The blueprints must have a kitchen equipment layout plan indicating the location of all the kitchen equipment as required on page #72 Section 229.165 (j) of the TFER.

Location of 3-Compartment Sink

The location of the 3-compartment sink and/or dishwasher must be indicated on the blueprints. Requirements for the 3-compartment sink can be found on page #69 Section 229.167 (g) (2)(A) of the TFER.

Location of Mop Sink

The mop sink location must also be indicated on the blueprints. Mop sink requirements can be found on page # 92 Section 229.166 (g) (3) of the TFER.

Location of Employee Hand Lavatories

All employee hand lavatories must be clearly noted on the blueprints. Hand lavatory requirements can be found on page #92 Section 229.166 (h) of the TFER.

Paper Towel and Soap Dispenser(s) Above all Employee Hand Sinks

Paper towel and soap dispensers must be installed above all employee hand lavatories as required on page #104 Section 229.167 (e) of the TFER.

Self-Closing Device on all Bathroom Doors

Note that a self-closing device must be provided on all bathroom doors as required on page #103 Section 229.167 (d) (4) of the TFER.

In-Direct Drain Connection for 3-Compartment Sink and Ice Machines

An in-direct drain must be installed on the drain line of the 3-compartment sink, ice machine, etc... as required on page#94 Section 229.166 (j) (2) of the TFER.

Hot and Cold Water Supply to all Sinks

All sinks and employee hand lavatories must have hot and cold water as required on page #90 Section 229.166(c) of the TFER.

Location of Outside Trash Dumpster

An outside area must be provided for the trash dumpster noted on the blueprints as required on page #96 Section 229.166 (l) (6) of the TFER.

Sneeze Guard Protection (if applicable)

Except for nuts in the shell and whole, raw fruits and vegetables that are intended for hulling, peeling, or washing by the consumer before consumption, food on display shall be protected from contamination by the use of packaging; counter, service line or salad bar food guards, display cases; or other effective means as required on page 39 Section 229.164(i)(1).

Food Protection During Display

All ready-to-eat food must be protected from contamination during display as required on page #39 Section 229.164 (j) of the TFER.

Location of Storage Area

Make sure that storage area is included in the design and indicated on the blueprints as required on page # 86 Section 229.165 (x) of the TFER.

FOUNDATION PLAN: (Designed as per the 2000 International Building Code)

Dimensions and Details for Construction

Provide a dimensioned foundation lay out to review size and coordinate with floor plan and site plan as per Section106 of the International Building Code.

Provide foundation details showing proposed beam and steel specifications. (Minimum slab steel requirements of No. 3 bars at max. of 16" o.c., or No. 6 Ga. wire mesh. Minimum beam steel requirements to be 2-No. 5 bars top and bottom of beam within minimum No. 3 bar stirrups. Bar stirrups placed at maximum 24" o.c. within beam.) Minimum beam sizes to 24"x12" at exterior, and 18" deep x 12" wide at interior beams. No interior beams to be placed more than 15ft.

from center to center.) Minimum requirements may be superceded if an engineer designs foundation.

Engineers' Seal Required if Building > 5,000 square feet

Foundations for structures other than single-family residences, 5000 sq. ft. or more must be designed and sealed by an engineer as per City Ordinance 02-35, and the Texas Engineering Practices Act.

ELECTRICAL PLAN (Reference the 2002 Edition of the National Electrical Code)

Provide Electrical Fixture Plan

Provide an electrical fixture plan as per Articles 80.21, and 410 of the N.E.C. to aid the review of the construction documents with regards to illumination, power distribution, and emergency power and lighting for egress.

Provide Electrical Panel Schedule

Provide electrical distribution panel as per Article 408 of the National Electrical Code (Panels and Switchboards), to verify and review wire and circuit sizing and power distribution.

Engineers' Seal Required if Building is > 5,000 Square Feet

Provide an engineer's seal on all electrical layout designs for buildings 5000sq. ft. or larger as per the Texas Engineering Practices Act.

Energy Conservation Report on Air-Conditioned Areas

ENERGY CONSERVATION REPORT ON A/C AREAS:

As per the requirements of the 2000 International Energy Conservation Code, all structures having a mechanical heating and cooling systems must meet minimum requirements in relation to insulation, opening percentages, and window glass types. The information required must be provided on a standardized format developed by the U.S. Dept. of Energy. The format is based on a computer program that determines if a structure is designed to meet codes, based on information provided. The main information required is as follows:

- Square footage of air conditioned ceiling area, and "R" value of said insulation.
- Square footage of insulated walls from non-conditioned spaces to conditioned spaces, and the "R" value of that insulation.
- Square footage of exterior glazed openings, and "U" value (u-value=r-value) of glass in these assemblies.
- Square footage and "U" values of solid doors in exterior walls.

- Square footage and “U” vales of exterior doors with 50% glass area.

Other information may be required depending on the construction of the project. This format and computer program may be downloaded on the following website: www.energycodes.gov. click on “free downloads”.

MECHANICAL LAYOUT PLAN: (As per the 2000 International Mechanical Code)

A/C Duct Layout

Submit A/C duct layout as per Chapter 6, of the 2000 International Mechanical Code.

A/C Equipment Schedule with Size Designation

Submit A/C equipment schedule showing size of units and as per Chapter 3, section304 of the 2000 International Mechanical Code.

Details on Dampers if Required

Provide details and specs on fire and smoke dampers as required in a/c ducts penetrating a rated wall or ceiling assembly per Chapter 6, Section 607 of the 2000 Mechanical Code, and Chapter 7 of the International Building Code.

Engineers’ Seal Required if Building is > 5,000 Square Feet

Provide an engineer’s seal on all mechanical layouts for buildings 5000 sq. ft. or more as per the Texas Engineering Practices Act.

PLUMBING PLAN (As per the 2000 International Plumbing Code)

Layout of all fixtures

All plumbing fixtures to be shown on floor plan as per Section 106.3.1 of the 2000 International Plumbing Code.

Schematic of Drain/Waste System Layout

Provide schematic layout of plumbing lines and fixtures as per Chapter 7 (Sanitary Drainage), of the 2000 International Plumbing Code.

Engineers’ Seal Required if Building is > 5,000 Square Feet

Provide an engineer’s seal on all plumbing system design drawings for buildings 5000sq. ft. or more as per the Texas Engineering Practices Act.

Provide an engineer's seal on all design drawings where the plumbing system will contain materials and methods of construction not specifically prescribed by the 2000 International Plumbing Code.

FIRE PROTECTION:

Designation of all Firewalls or Partitions

A fire wall is a fire resistant U.L. rated wall having protected (U.L. rated) openings (door or window assemblies), which restrict the spread of fire and extends continuously from the foundation to or through the roof, with sufficient structural stability under fire conditions to allow collapse of construction to either side without collapse of the wall.

A fire partition or fire barrier is a fire resistance rated vertical or horizontal assembly of materials designed to restrict the spread of fire in which openings are protected.

These firewalls or partitions are designated to protect designated fire areas from the spread of fire from adjacent fire areas.

U.L. Directory, Fire Resistance, Vol. 1A

Design #U902 (4-hour rating)

Design #U904 (3-hour rating)

Design #U906 (2-hour rating)

Table 705.4 International Building Code 2000 Edition

N.F.P.A. Std. 220, Type of Building Construction, 1999 Edition

Fire Rating Designation on Door/Window Assemblies in Fire Rated Walls or Partitions

These assemblies refer to door and frame or frame and glass units in U.L. fire rated walls or partitions. These assemblies should provide a specific degree of fire protection to the openings they serve. The doors or windows in these walls should be rated equal to the rating of the walls in which they are placed.

Table 704.1 International Fire Code 2000 Edition

Table 712.2 Chapter 7, International Building Code 2000 Edition

Table 714.3.2, Chapter 7, International Building Code 2000 Edition

N.F.P.A. 80, Fire Doors and Windows, 1999 Edition

Fire Alarm Layout (if required)

This is an indication of placement of the fire alarm system components. This requires a licensed fire alarm contractor layout and installment

Chapter 9, Sections 907.1 – 908.6, International Fire Code 2000 Edition

N.F.P.A. Std. 72, Installation, 2002 Edition

Fire Suppression System Layout (if applicable – sprinklers, stand pipes, aerosol systems, CO2 systems, etc.)

This is an indication of the placement of sprinkler system components. This requires a licensed fire alarm or sprinkler contractor layout and installment.

Automatic Sprinkler Systems, Chapter 9, Section 903 – 905.11.6.5, International Fire Code 2000 Edition

N.F.P.A. Standards 13, 13R and 13D, 2002 Editions

Standpipe Systems, Chapter 9, Section 905 – 905.11, International Fire Code 2000 Edition

N.F.P.A. Std. 14, 2003 Edition

Automatic Extinguishment Systems/Cooking Appliances, Chapter 5, Section 509, International Mechanical Code 2000 Edition

N.F.P.A. Std. 96, 2001 Edition

Commercial Kitchen Grease Ducts/Exhaust Equipment, Chapter 5, Section 506, International Mechanical Code 2000 Edition

Fire Department Accessibility

The Fire Department must have access to a building and its fire suppression system hookups where applicable. This can be indicated as a marked fire lane and indication of location of system hookups by signage and/or painting.

Appendix “D”, Fire Apparatus Access Road

Section D101 – D107, International Fire Code 2000 Edition

N.F.P.A. Std. 1141, 2003 Edition

Residential Construction

GUIDE FOR RESIDENTIAL CONSTRUCTION

The following information may be used as a general guide to ensure that all required information is included on blueprints to avoid delays in receiving your building permit. This section is applicable to new single-family residential construction as well as additions and remodels.

The City of Harlingen has adopted the following codes to shape single-family residential development within the city limits:

2000 International Building Code (IBC)
2000 International Mechanical Code (IMC)
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2000 International Fire Prevention Code (IFPC)
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2003 Life Safety 101 Code
Zoning Ordinance #97-34
Subdivision Ordinance #01-01

A full copy of most of these codes are available for reference in the Building Inspection Department library located opposite of the permit counter within the Lon C. Hill Building at 502 E. Tyler Avenue

Note: These codes are subject to revision as new codes become available and adopted by Ordinance.

Evidence of Registration with the Texas Residential Construction Commission (TRCC)

All home contractors and remodelers are required to register with the TRCC prior to obtaining a building permit as of 2004. (Remodeling projects less than \$20,000 are exempt from registration provisions.)

Site Plan with Legal Description and Address

Provide a location site plan with an address and or legal description as per Section R106.2 of the International Residential Building Code. The legal description can usually be found on the current tax rolls or referenced on the yearly tax bill. The format is usually Lot, Block, Subdivision (such as Lot 1, Block 3, Moran Estates Subdivision). If it cannot be located by these means, check with the City of Harlingen Planning Department for assistance (956-427-8727).

The address is the physical address of a property. If it is a vacant lot, it may not have an assigned address. The Chief Building Official can assign official addresses that typically consist of a 3 or 4 digit number, direction and street (502 E. Tyler Avenue). (Contact 956-427-8730 for a new address assignment when necessary.)

Is Property Subdivided? Or has Letter of Exemption been Processed?

The City of Harlingen has had a Subdivision Ordinance since November 1978 governing the splitting or subdividing of property. The City of Harlingen can only issue a building permit on property that has been legally subdivided and recorded at the Cameron County Courthouse.

The Subdivision Ordinance allows in some circumstances, property to be exempt from the Subdivision Ordinance requirements. This is for properties that have been in their current shape or configuration since November 1978 or exceed 5 acres in size. In these cases, a letter of exemption may be applied for through the City of Harlingen Planning Department. A copy of the *Application for Exemption Letter of Determination* is available in Appendix A. Further information can be obtained from the Harlingen Planning Department.

Is Property Zoned for Intended Use?

Check with the City of Harlingen Planning Department to determine the zoning of the property to determine if the intended land use or activity is permitted on the property (956-427-8727). Property zoned Light Industrial (LI) is not eligible for single-family residential uses and may not be allowed remodeling or addition permits unless a variance is obtained.

Two Sets of Construction Drawings

Provide 2 sets of construction documents for review as per Section R106.1 of the International Residential Building Code.

Floor Plan with Electrical and Plumbing Layout/Details

The construction documents shall contain the following:

- a. A fully dimensioned floor plan used for verification of building size.
- b. A floor plan showing all pertinent information concerning the electrical system of the residence to verify compliance with the 2002 Edition of the National Electrical Code.
- c. A floor plan showing all locations of plumbing fixtures as per the requirements of the 2000 International Plumbing Code.

NOTE: The electrical and plumbing layouts maybe incorporated into the “dimensioned floor plan” insofar as none of the information required is diminished in its clarity.

Door and Window Schedule/Size and Notations

A floor plan showing sizes and locations of doors and windows to verify compliance of said openings with the requirements of the International Residential Code with respect to emergency egress, and to verify compliance with the 2000 International Energy Conservation Code with respect to allowable areas of wall fenestrations.

Wall Section, Joist and Rafter Details (if applicable)

Wall construction details, ceiling joist and rafter details shall be provided for review of compliance with Chapters 6, and 9 of the 2000 International Residential Building Code.

Foundation Plan

A foundation plan will be included in the construction documents as required to verify conformity with the submitted floor plan. The foundation plan will be fully dimensioned and detailed as required in Section 106.1 of the 2000 International Residential Building Code.

Foundation Details

A set of foundation details shall be part of the submittal with the foundation plan. These details shall show size of beams and steel if a concrete slab is called for, and size and location of all pier and beams construction foundation.

- a. Standard beams shall be 12"x24" minimum at exterior locations, and minimum of 12"x18" deep at interior locations. The slab steel to be a minimum of No. 3 bar at a maximum of 16" o.c. both ways, or No. 6 wire mesh. Beam steel to a minimum of 2-No.5 bars, top and bottom of beams, within No. 3 bar stirrups. Bar stirrups to place at a maximum of 24" within beam.
- b. Sizes of floor joist and girders for pier and beam wood floor construction shall comply with Chapter 5 of the 2000 International Residential Building Code.

Elevations with Plate Heights

Provide exterior structure elevations detailing designated plates heights at all exterior walls. This information is required to verify information submitted on the Energy Compliance Report. The report is required by the International Energy Conservation Code.

Energy Conservation Report if > 500 Square Feet and Air Conditioned

Provide an Energy Compliance Report as per the International Energy Conservation Code. This report shall contain the "R" values of all wall and ceiling insulation materials, and the "U" values of all doors and window. This report shall also include the sq. footage area of all insulated exterior walls and ceilings, as well as sq. footage designations for doors, windows, and glass block portions in exterior walls.

Note: The Energy Compliance report is only required on new residential structures with mechanical heating and cooling systems, and on additions of 500 sq.ft. or larger with mechanical heating and cooling systems.

Indication of Direction of Drainage

Indicate on site plan all proposed drainage design to allow water to drain away from the residence, yet not toward a neighboring property. This is to comply with the Zoning Ordinance of the City of Harlingen, and with Section 801.3 of the 2000 International Residential Building Code.

Summary of Work to be Done

Anything not evident on the plans should be documented in writing and submitted with the blueprints for complete evaluation.

Windstorm Compliance

As per Section R301.2.1.1, Construction in areas where the basic wind speeds equal or exceed 110 mph, which includes the Harlingen area, shall be **designed** accordance with the guidelines set down by the American Forrest and Paper Association for wood frame construction, the Southern Building Code Congress SSTD-10 manual for Hurricane Resistant Construction, or the minimum design loads as per engineering manual ASCE-7. In effect all new construction in Harlingen must be designed to comply with hurricane resistant construction practices. In most case, this can only be done with the assistance of a design professional, such as a structural engineer. At some point during the construction process, before the framing inspection, or at the time of document submittal, the City of Harlingen will require a document from a design professional, verifying compliance of the design of the structure with hurricane resistant guidelines. Also, the Texas Department of Insurance will not issue “Wind storm insurance” without verification of this type of design.

The State of Texas has established the Texas Residential Construction Commission, which requires all residential homebuilders and remodelers to be register with the State for the purpose of regulating the building industry for the benefit of the consumer. The City of Harlingen will require proof of registration before issuance of any permit for this type of work for individuals other than homeowners doing work on their homesteads.

Please contact Eddie Olvera, Plans Examiner, at 956-430-6641 for any additional information regarding residential construction.

Appendices

Appendix A – Application for Exemption Letter of Determination

Appendix B – Tree Removal Application

Appendix C – Setback Illustration

Appendix D – Site Triangle Illustration

Appendix E – Parking Illustration

Appendix F – Typical Wall Section