PLAN SUBMITTAL PROCEDURES FOR SCHOOLS

PROCEDURES

I. Two (2) complete sets of plans shall be submitted and must include all the plan review prerequisites listed on "Form CE-1105 Prerequisite Checklist" (included in this package).

II. Designer contact information shall be submitted with each plan to indicate the name and direct phone number of the individual who is responsible for each section of the plans. For example, "Electrical - John Smith 123-456-7890".

III. Master projects will be used when more than one building will be renovated on the same site. This master number will be the number that is tracked in the review process. Plan tracking is the only function of the "master" status. Each building that has work to be done under the submittal documents will be required to have its own application, permit and address designation. Ex: "3300 Main, T1" is a separate address from "3300 Main". Buildings should be identified on the site plans by building number or address. All inspections shall be requested under the proper respective project number. This will simplify the inspection process and make the job finalization much easier.

IV. Addresses for any new building should be obtained through the *Permits Section*. Contact the *Permits Section* for information about obtaining new addresses at 832-394-8899 or email at permits_office@houstontx.gov.

V. Project phasing will be done through the *Structural Inspections Section.* Phasing plans shall be designated in the architectural floor plans and will be verified by the structural field inspector prior to any portion of the renovated areas being released for occupancy. The phasing plan shall also include an exit analysis for each phase of the project.

VI. A certificate of occupancy will be issued for new buildings and/or new portions of an existing building. Renovation projects will receive a certificate of compliance.

VII. T-buildings used for displacing students during construction shall be submitted separately from other projects. The plans shall include an overall site plan and building plans for each T-building. Electrical, plumbing, and mechanical plans shall be included for each building.

HELPFUL SUGGESTIONS

- Always submit a response sheet when resubmitting corrected plans
- Make written request for deferred submittals (ex: curtain walls, metal stairs, canopies) by completing "Form CE-1086 Plan Review Request for Deferred Submittal" (included in this package).

CONTACT INFORMATION

Commercial Plan Review Section

Hours:	8:00 a.m. – 5:00 p.m.	Phone Number:	832-394-8810
Location:	1002 Washington Ave., 2nd Floor Houston, Texas 77002	Fax Number:	832-394-9623

Other Important Phone Numbers

Customer Assistance and Code Development Office ..... (832) 394-9000
Development Services (Planning) ..... (832) 394-9091
Health ..... (832) 394-8848
Structural Inspections ..... (832) 394-8840
Taps & Meters..... (832) 394-8888
Traffic and Transportation..... (832) 394-8851

PLAN SUBMITTAL PROCEDURES FOR SCHOOLS

DESIGN OCCUPANT LOAD FOR SCHOOLS

1. **Class Rooms**
   Determine net square footage of each classroom and use O.L. factor 20 sq. ft. per person and then add up occupant load of each classroom to find the total occupant load.

2. **Office Area**
   Determine occupant load based on gross area of office portion using 100 sq. ft. per person.

3. **Total**
   Add up classroom load and office area together to find total occupant load of the school.

4. **Gymnasium, Cafeteria, Cafetorium & Auditorium**

Gymnasium & cafeteria	=	Use 15 sq. ft. per person to find total occupant load
Cafetorium	=	It is for dual purpose as a cafeteria and as an auditorium. Without any fixed seats, use 7 sq. ft. per person to find the total occupant load of cafetorium.
Auditorium	=	If there are no fixed seat, then use 7 sq. ft. per person and if there are fixed seats, count total no. of seats to find the occupant load.

5. **Library**

Reading rooms	=	Use 50 sq. ft. per person for net area used as reading room to find the occupant load.
Stack area	=	Use 100 sq. ft. per person for gross area of stack room/area to find the occupant load.

6. **Non-Simultaneous Use**
   If gymnasium, cafeteria, cafetorium, auditorium, or library is used only for displaced students, then that occupant load is not added to the total occupant of the school, but that occupant load is used to determine exit requirements of that portion.

   In case any of these portions are used by outsiders temporarily for any occasion or celebrations, then the occupant load of that portion is added to the total occupant load determined in step 3 to find the grand total of occupant load.

7. **Simultaneous Use**
   If a gymnasium, cafeteria, cafetorium, auditorium, or library is a separate, stand-alone building, then it will have its own occupant load.

NOTE: If there is a reduction of occupant load based on teacher/student ratio as per Texas Education Agency, building official's approval is required as per Sec. 1004.1 of the Houston Building Code.

PREREQUISITE CHECKLIST
PLAN REVIEW PROCEDURES

In an effort to reduce the amount of time required to obtain a building permit the Planning and Development Services Division has established the following *commercial* plan review prerequisites. These prerequisites are provided as a tool, customers can use to create a complete construction document plan set, thereby reducing the need for multiple plan submittals and avoiding lengthy time delays.

To provide the most effective service for our customers, incomplete plans submitted to the Plan Review Section will not be reviewed and will be returned with a notice to submit complete plans.

The following list of items must be submitted in order for your plans to be considered as complete for the purpose of plan review. Please note that these items are only required if the scope of work is applicable. Please consult plan review to properly complete and address applications for partial projects.

A. **Plans Issued For Review Must Be Ready For Construction** – Plans may "*Not*" be marked "*Preliminary* or *Not for Construction*"
B. **Plan Sets** – Minimum 2 sets that match and are bound (4 sets for Hazmat or High Pile Strg.)
C. **Site Plan** – Required for all new buildings, structures, parking lots, grading permits and additions. Also required for a change in occupancy (a.k.a. conversion)
D. **Landscaping** – For new parking lots, new buildings, and for additions greater than 1,000 sq. ft.
E. **Energy Form** – Required for building projects if only to explain the reason for exemption from the energy code
F. **Applications** – A complete Application is required for each new structure, lease remodel or buildout proposed
G. **Plan Review Fee Valuation** – Permit fees are based on the total cost for all work proposed including labor and design costs, and must be provided for each separate permit. The cost shown on each application for multiple-numbered projects must reflect the cost associated with the scope of work for each separate permit number.
H. **Structural & Nonstructural Drawings**
    1. Labeled floor plan with drawing details of the proposed scope of work.
    2. Structural plans. *(when applicable)*
    3. Architect and Engineer plans, each sheet sealed, signed and dated; *(when applicable)* as required by Texas Architectural and Engineering Practice Acts.
    4. Code Analysis for new structures – construction type, occupancy classification and/or specific use proposed.
    5. Soil Report for new buildings and additions, or soil classification listed on the foundation plan by the engineer.
    6. Door & hardware schedule, glazing schedule, and wall schedule or legend differentiating the walls shown in the plan
I. **Mechanical** – All new buildings and renovations that involve change of occupancy, new or change out of equipment, fire/smoke dampers, or new or replaced ducts.
J. **Electrical**
    1. 1-line diagram – Required for new buildings, new service, added loads, or change of occupancy
    2. Load analysis – Required for new buildings, new service, added loads, or change of occupancy
    3. Panel schedule – Required for new buildings, new service, added loads, or change of occupancy
K. **Plumbing**
    1. Riser diagram and floor plan – Required for new piping, new plumbing fixtures, and/or change in occupancy
    2. Utility letters – Required for grading projects, parking lots, new buildings, existing structures with increased water usage, and changes in occupancy with increased water usage
L. **Letters of Availability** – Storm letters required for all new construction and site renovations. Sewer and water letters are required for new construction, change in occupancy, and/or an increase or decrease of capacity for any proposed development. Photocopies of the availability letters and fee receipts must be attached to the front of each plan set when submitting. When short forms are allowed photocopies of the short form must be attached to the front of each plan set.
M. **Storm Drainage / Civil Plans** – All new parking lots, new buildings, grading permits, and projects adding impervious cover.
N. **Fire Alarm Plans** – When required by code, included in the project, or for renovations where fire alarm systems exist
O. **HazMat Details or Exemption Form** – For labs, fabrication, storage facilities and retail involving hazardous materials,
P. **High Piled Details or Exemption Form** – For all storage and some retail occupancies
Q. **Health Plans** – For all projects involving food and drink preparation and/or establishments
R. **Airport Signatures** – For aviation projects

SCHOOL CHECKLIST
2003 IBC, 2000 UMC, UPC, COH ENGERGY CODE, 2008 NEC

Submit two ***(2) sets*** of non-erasable/legible ***ready-for-construction*** plans including (but not limited to) a survey and a Site Plan. NO SPEC BOOKS.

The following are some of the ***basic and frequently overlooked code requirements*** that must be detailed on plans for Schools and may be useful as a checklist for the designer. This ***list is not*** intended to be ***exhaustive*** of all possible requirements. The code books along with the code of ordinances of the City of Houston contain the comprehensive list of code requirements.

Inconsistencies between details ***will be noted*** as needing to be corrected.

GENERAL REQUIREMENTS

CODE REF	REQUIREMENTS	
BUILDING PERMIT APPLICATION		
105.3	One Per Building – Distinct Building #. **Address is critical**	
	Project Number (Assigned by the City of Houston Permit Office)	
105.3	Scope Clearly Defined (New, Addition, Remodel, T-Building)	
	Cost Of Construction (Material And Labor At Industry Costs) / Separate Breakdown New & Remodel	
	Legal Description (New Buildings and Additions)	
	Number of Stories	
State Law	TDLR Registration Number for ADA (If required)	
State Law	Asbestos Survey (If it's an existing bldg.) – A separate document attached to application	
	Sprinkler (Yes or No)-Percentage and Type	
	Responsible Parties	
	Deed Restriction Affidavit (Reverse side)	
WATER/WASTEWATER		
	Wastewater – Taps & Meters Water Meter Account	
	Utility Connection Locations	
	Wastewater Capacity Application And Fees Or Exemption Form	
	Occupant Load Match With Code Review Occupant Load *	
CODE ANALYSIS		
Ch. 3	Occupancy Classification	
Table 503	Building Height And Area	
504	Height Modifications	
506	Basic Allowable Area & Area Modification	
507	Unlimited Area	
Table 601	Type of Construction (can be found on Certificate of Occupancy)	
302.3	Mixed Occupancy Separation	
302.1.1	Incidental Use Areas	
Table 601	Fire-Resistance Rating For Building Elements	
705	Fire Separations	
706	Fire Areas / Barriers	
Table 1004.1.2	Design Occupant Load	
1004.1.1	Actual Occupant Load (Request Building Official Approval)*	
305.2, 308.5.2	Daycare	
302.2	Accessory Use Areas	
302.2.1 notes e, f	Special Occupancy Separations	
509	Foundation Elevation with Elevation of Nearest Sanitary Sewer Manhole Rim	
SITE PLAN		
	Master Plan For Campus	
106.2	Footprint Of All Existing Building With New Additions Or Structures	
106.2	Property Lines	
704.3	Assumed Property Lines (If Required)	
106.2	Easements / Building Setbacks	
106.2	Dimensions	
106.2	Address & Use Of All Buildings On Site	
	Parking / Paving/ Approaches / Sidewalks	
DRIVEWAYS/ SIDEWALKS		
Sec. 3110	Width, Radius And Distance To Both Property Lines	
	Sidewalk Required If Inside Loop 610, On A Major Thoroughfare, Or If Lot Frontage Is 125 Feet	
	Not Less Than 25 Feet To Corner Intersection	
	Must Have Traffic Section Approval	
SPECIAL INSTRUCTIONS		
	List Each Designer on the Drawing Set by Specific Trade – Name, Phone #	
106.1.1	Scope of All Work to be Installed on this Permit	
	Determine Total Square Feet of New Paving	

SCHOOL CHECKLIST
2003 IBC, 2000 UMC, UPC, COH ENGERGY CODE, 2008 NEC

STRUCTURAL REQUIREMENTS

CODE REF	REQUIREMENTS	
FOUNDATION PLAN		
1802	Geo-technical Investigation Report (Attached to Each Set of Plans)	
1805	Engineered Foundation Layout – Location of All Footings and Piers	
1805, 1808	Engineered Details Including Pier Designs & Footings Referenced on Layout	
	Beam Sections	
1907	Reinforcement Details	
1808.2	Drill Pier Details	
	Engineer Block Layout (If Required)	
FRAMING		
106.3	Complete Engineered Framing Plans	
1609.3	110 Mph Wind Speed - 3 Second Gust	
	Engineered Metal Building Plans	
1607.1	Engineer Metal Stair Drawings	
Ch. 16	Structural Loads : Storage = 125psf/Light Or 250 Psf/Heavy, Stairs, Handrails, Guard Rails	
	Structural Masonry Designs (Including Trash Enclosures)	
3104, 3105, 406.5.2	All Canopies And Covered Walkways	
	Wall Sections – Foundation To Ridge	
	Floor, Ceiling And Roof Framing Details	
	Fire Rating Designs And Numbers (UL, Gypsum Manual Or IBC Ch.7)	
Ch. 7	Fire Rated Design Detail From Approved Agency or IBC, Chapter 7	
Table 602	Fire Rated Exterior Walls (<5' From Property Line Must Be 1 Hour Wall)	
2110.1.1	45 Minute Glass Block Otherwise No Openings	
603	Combustible Material In Types I And II Construction	
CECC – Table 5.5-2	Insulation R-Values	
	Wood:	
	Lumber Size, Grade, Species, and Spacing For Studs, Joists, Rafters	
	Windstrapping From Appendix or Engineered Design	
	Wind Bracing	
2304.9	Nailing Schedule	
1209.2	Attic Access: 22" X 30" = No Equipment or 30" X 54" with 350lb. Load Ladder =Equip In Attic	
A9.4 CECC	Framing Dimension Must Be Large Enough To Allow For R Value Insulation Thickness	
717.2.4, 1019.5 (1	Enclosed Useable Space Below Stair Must Have ½" Gypsum Board	
1609.3	Engineered Tie-Downs (Modular Building) note: 110 MPH Wind Speed - 3 Second Gust	
FIRE PROTECTION		
903	**SPRINKLERS WHERE REQUIRED**	
903.2.10.1.3	Basements > 1500 sq ft	
903.2.2	Area > 20,000 sq ft	
Table 601 note d	Reduction of Hourly Ratings	
903.3.1.1	Sprinkler Standard NFPA 13	
903.3.5	Valves Controlling Water Supply	
1015	Exit Access Travel	
907.2.3	**FIRE ALARMS**	
907.3.1	Manual Fire Alarm Box Exemption	
	Texas P. E. or Alarm Planning Superintendent	
905	**STANDPIPES REQUIRED**	
905.3.1	Buildings With Floors > 30 Ft Above Grade	
905.4 – 905.6	Hose Connection Location	
905.2	Standpipe Standard NFPA 14	
905.9	Valves Controlling Water Supply	
905.7	Cabinets	
EXITS		
1008.1.8	Door & Hardware Schedule Including Panic Hardware	
1005.1	Exit Capacity > Occupant Content	
1004.5	Converging Exit	
1013	Travel Distance & Arrangement Of Exits	
1014.1	Two Exits (Room Or Tenant Space > 50 Occupants Or > Travel Greater Than Table 1015.1	
1013.3	Common Path Of Travel	
1014.2	Exit Separation (1/2 Diagonal Dimension Of Building – 1/3 If Sprinkled)	
1018	Minimum Number Of Exits	
1018.2	Single Exit (One Story, 50 Occupants, And 75 Ft. Travel Distance)	
1016.2	Minimum Width Of Access Corridor	

SCHOOL CHECKLIST
2003 IBC, 2000 UMC, UPC, COH ENGERGY CODE, 2008 NEC

1005.1	Minimum Stair Width / Door Width (Table 1005.1, 2006 Code Update)	
1014.3	Boiler, Incinerator Or Furnace Room	
1014.5	Refrigeration Machinery Room	
1016.3	Dead End Corridor < 20ft.	
1016.1, 1019	Exit Access Corridor	
1019.1.8	Smokeproof Enclosures	
505.3	Mezzanines	
1009.3	Stair Details – Rise And Run, Tread Details	
1019.1.6	Stairway Identification For Stairs That Continue Below The Level Of Discharge	
1009.5	**STAIRWAY CONSTRUCTION**	
1009.3.2	Closed/Open Risers	
1019.1.5	Separation Of Closets Below Stairways	
1009.3	Stair Treads And Risers	
1009.3.1	Uniform Treads And Risers	
1009.4	Landings	
1009.11	Handrails	
1009.2	Headroom	
1009.12	Access To Roof	
1021.1	Horizontal Exits	
1004.3	Assembly Room Capacity Sign	
Table 1014.1	Assembly Room Exits	
1022	Exterior Exit Stairways	
1022.5	Adjacent Lot Lines	
1022.6	Fire Resistive Separation	
1023	Exit Discharge	
1008.1.3.4	Electronic Locks	
1008.2	Locked Gates	
1010.1	Ramp Details – Slope, Surface, Edge Treatment	
1013.5	Balconies	
1012.3	Guardrails – Maximum 4” Openings And 42” Height	
1011.2	Exit Illumination And Signs	
1019.1.7	Stairway Floor Number Signs	
1003.6	Exit Obstructions	
ENGINEER’ S SEAL	(When required)	
106.3.4	Required on Foundations	
106.3.4	Required on Structural Steel	
106.3.4	Required for Prefab Trusses and Beams	
106.3.4	Required for Masonry > 2 Feet	
106.3.4	Signed and Dated After Latest Revision by Engineer Responsible for New Revisions	
SAFETY GLAZAING		
2406.3, item # 5	Shower and Tub Enclosures	
2406.3	Side Hinged Doors	
2406.3 item #10	Adjacent to Stairs and Landings	
2406.3 item #6	Panels Adjacent and within 24 Inches of Door	
2406.3 item #7	Panels with 9 Square Feet and Bottom with 18 Inches of Floor and Top Above 36 Inches Above Floor	
FLOOR PLANS		
106	Dimensioned and to Scale	
	All Rooms Labeled by Use	
Ch.8	Finish Schedule	
2008 COMMERCIAL ENERGY CONSERVATON CODE		
4.2.2	City of Houston Energy Form or Software Report – Match Plans And Software Report/Form – Attach To Each Set	
4.2.2.	Commission Form (if required)	
	Square Footage Of Floors And Walls	
	Percent Of Glazing Required Computation	
	Energy Glazing Factors SHGC And U Factor	
	Building Envelope Insulation R-Values	

SCHOOL CHECKLIST
2003 IBC, 2000 UMC, UPC, COH ENGERGY CODE, 2008 NEC

ELECTRICAL REQUIREMENTS

CODE REF	REQUIREMENTS	
2008 NEC		
302.2 (Administrative)	Engineer Seal (Master If Minor Remodel Not Requiring Engineering)	
110.26	Working Space about Equipment	
110.26	Entrance to Working Space	
110.26	Headroom about Equipment	
110.26	Dedicated Equipment Space	
210	Branch Circuit Requirements	
210	Required Outlets	
215	Feeder Requirements	
220	Load Analysis/Service Calculations	
230	Service Requirements	
	Complete One Line Diagram	
250	Grounding Requirements	
300	Wiring Methods and Material	
408	Panels Schedules	
	Fixture Schedules	
2008 CITY OF HOUSTON COMMERCIAL ENERGY CONSERVATION CODE		
4.2.2	Fill out the COH 2008 Commercial Energy Conservation Code Compliance Form (Page 3 & 4)/ or Software Report	
	Signed by Engineer, or Architect	
9.1.4	Identify Fixtures by Wattage	
9.4.1.2	Space Control	
9.4.1.1	Auto Lighting Control	
9.4.1.3	Exterior Lighting Control	
Article 410	IC Rated Fixtures	

MECHANICAL REQUIREMENTS

CODE REF	REQUIREMENTS	
2003 IBC		
Table 716.3.1	Fire Rated Floor/Ceiling Assembly	
Table 720.1 (1)	Fire Rated Floor/Ceiling Assembly	
UL design	Fire Rated Floor/Ceiling Assembly	
712	Fire Rated Floor/Ceiling Assembly	
712.3.1.1	Fire Rated Floor/Ceiling Assembly	
Table 716.3.1	Fire & Smoke Damper Locations	
Table 716.3.1	Corridor Enclosure (One Hour Corridors)	
Table 1016.1	Corridor Enclosure (One Hour Corridors)	
Table 716.3.1	Shaft Enclosures (Fire & Smoke Dampers)	
707	Shaft Enclosures (Fire & Smoke Dampers)	
106.1	Engineer Seals (Current Seal Signed & Dated)	
3006.2	Provide Ventilation For The Elevator Machinery Room	
UL Design	Provide The Model & Manufacture For Dampers	
UL Directory	576 Sq. Inches Of Opening Per 100 Sq. Foot	
2000 UMC		
113.3.1	Penetration Details Of Fire Rated Assemblies	
113.3	Provide An Equipments Schedule	
310.1	Condensation Removal	
408.3	Toilet Exhaust	
Table 4-1	Outside Air Requirements For Ventilation	
Table 5-1	Dust Collection	
Table 5-1	Fume Hoods	
504.3	Dryer Ducts	
506.9	Exhaust Outlet Termination Points	
Article 15 (2000 IFC)	Paint Spray Booths	
508	Kitchen Exhaust Systems	
504.1and 509.9	Makeup Air For Exhaust Systems	
509	Commercial Kitchen Hoods	
510	Automatic Fire-Extinguishing Systems	
903	Access To Equipment	
1105.8	5 Hp Units > 10 Foot From Exit	
1107.1.1	Chiller > 20 Foot From Opening In Building	
1107	Refrigeration Machinery Rooms	
1108	Refrigeration Machinery Room Ventilation	
1108.7	Refrigeration Ventilation Discharge	

SCHOOL CHECKLIST
2003 IBC, 2000 UMC, UPC, COH ENGERGY CODE, 2008 NEC

2008 COMMERCIAL ENERGY CONSERVATON CODE		
4.2.2	City Of Houston. Energy Compliance Form and Commissioning Statement (when required)	
6.4.1	Equipment Efficiency Rating (SEER, EER, IPLV, COP)	
6.4.3	Programmable Temperature Controls	
6.4.3.1.2	Temperature Range Or Deadband	
Table 6.4.4.1.1	Duct And Plenum Insulation	
6.4.3.4	Damper and Ventilation Controls	

PLUMBING REQUIREMENTS

CODE REF	REQUIREMENTS	
SWQMP	Obtain Storm Water Quality Permit from PWE Department	
SITE PLAN		
	Location of easements	
	Water, sewer, storm piping to be shown on site plan	
	Provide utility letter(s) – water / sewer / storm	
	Show all piping to point of connection to city services as per letters of availability.	
	Dimensions from property line to buildings	
	Specific type of material for all piping systems	
	Internal site drainage details	
	Surface Site drainage	
	Stormwater Pollution Prevention Plan	
2000 UPC		
Table 11-1, 11-2	Complete riser diagram for all roof drainage showing sq. foot area for each roof drain, over-flow drain or scupper, with all sizes	
Sec 1101-1102	New roof drains with square foot area for each on riser diagram and roof plan	
Ch. 6	Provide details of water heaters, back-flow preventers, water softners, surge tanks, sump pumps, and acid dilution tank if required	
Table 6-4, APP A	Water pipe sizing	
	Complete riser diagram for all waste and vent piping with all pipe sizes shown	
Ch.12	Riser diagram for any gas showing distance from meter to each opening	
	Specific types of all piping materials to be noted on plans	
Ch.20	Comply with any health department requirements for plumbing related items	
Table H-1 & APP H	Calculations and any details	
2003 IBC		
Table 2902.1	Calculations for sanitary facilities to insure required fixture count	
2008 COMMERCIAL ENERGY CONSERVATON CODE		
Table 6.8.3	Minimum Pipe Insulation	
7.4.4	Controls	

T - BUILDINGS REQUIREMENTS

CODE REF	REQUIREMENTS	
GENERAL		
	Four sets of plans	
	Site plan with dimensions to property lines an other buildings	
STRUCTURAL		
	State of Texas approval or a complete set of structural plans	
	Foundation plan with engineered tie-downs	
	Exit stair and ramp details (engineered)	
ELECTRICAL		
	State of Texas approval or a complete set of electrical plans	
302.2	Engineer Seal or Master Electrician	
302.2	Electrical site plan, location of service	
240	Complete one line diagram	
MECHANICAL		
	State of Texas approval or a complete set of mechanical plans	
	Must show the route and disposal method of condensation from the A/C units	
	When stacked together forming a one-hour corridor, must show code compliance for the corridor (smoke dampers)	
	Site plan with dimensions	
	Show dimensions from building to property line and to existing buildings	
PLUMBING		
	Temporary building with plumbing-show water and sewer sizes with specific type of material from building to point of connection	
	Grading plan for area of temporary buildings – show elevations draining to existing on site drainage	
	Note on cover sheet if occupants of new or relocated temporary building are for new students or relocated students. If relocated students, note if existing restroom facilities are to be usable during construction or if you are placing a restroom temporary building	

PLAN SUBMITTAL PROCEDURES FOR SCHOOLS
FIRE ALARM REQUIREMENTS – 2003 IBC/2000 IFC

NEW SCHOOLS, NEW ADDITIONS, NEW OR USED MODULAR BUILDINGS MOVED TO NEW LOCATIONS.

1. See IBC 2000 Sec. 907.2.3 for F/A device requirements. .
2. Installed per NFPA 72 – 1996 Edition.
3. Visual alarms must comply with IBC 907.9.1.1 and NFPA 72.
   Generally visual alarms are required in all areas with the exception of private offices, storage rooms less than 20 sq. ft. and toilet rooms opening only into private offices, shallow closets, janitor closets, unoccupied equipment rooms (mechanical, electrical, communications) and storage rooms opening into classrooms that are for the exclusive use of the teacher.
4. Provide a legend for F/A symbols used.
5. Provide a sequence of operation for F/A system. (Must activate a general alarm through-out all buildings).
6. Drawings must display an alarm planning Superintendent or a Texas Registered Professional Engineers stamp.
7. F/A systems must be monitored per IBC Sec. 901.6.2

EXISTING SCHOOLS

1. If a complete new F/A system is installed, it must comply with items # 1 thru # 7 above for new schools.
2. If school is just remodeling to some degree, the F/A system installed at time of original construction or its approved upgrades may remain.
3. New visual alarms complying with above mentioned item # 3 shall be installed in all remodeled areas.
4. Any plans submitted must show and identify all existing devices remaining, existing devices relocated, and new devices, (show on floor plans and in F/A legend).
5. Items # 5 & # 6 above required on all drawings.
6. All T-Buildings must be tied to FACP in main school building. Activating main F/A system and vice versa.

Exception: If main school buildings are vacant of students and faculty during construction.

Department of Public Works & Engineering
Planning & Development Services Division

REQUEST FOR A REDUCED OCCUPANT LOAD FOR AN EDUCATIONAL OCCUPANCY

The purpose of this form is to calculate an *actual* occupant load in an educational space that is governed by Texas Educational Agency (TEA) rules that limit maximum class sizes. The code review will be based on the *design occupant load*. Once the code review is approved, the *actual* value will be used to correlate the Wastewater Capacity Reservation letter with the Certificate of Occupancy. This will eliminate unnecessary Wastewater Capacity fees for the school.

PART I. APPLICATION - Use the instructions in Part II, to help complete this form.

General Information	
1. School Name:	*5. Date:*
School District:	
2. Project Address	6. Project Number:
Mailing Address:	
3. Contact Name:	7. Phone:
Email:	Fax:
4. District Representative:	8. Phone:
Email:	Fax:

Occupant Load Calculation.			
9. Number of Buildings: (1 unless Temporary Buildings)		12. Total TEA student allocation per building:	
10. Number of Classrooms:		13. Assigned School Staff per building:	+
11. Design Occupant Load:		14. Additional Occupant Load: ****Optional****	+
DISTRICT REPRESENTATIVE SIGNATURE ** REQUIRED*** ***Note:*** *Applications without the signature will not be processed.* _____		15. Actual Occupant Load:	=

Comments and Explanations – Please list any additional information to assist with approval

PART II. DEFINITIONS AND INSTRUCTIONS

Definitions: Use these definitions to help with the terms in Part I of the form.

TEA - The Texas Education Agency.

DESIGN OCCUPANT LOAD -The number of persons for which the means of egress of a building or a portion thereof is designed. Using the formulas in Section 1004 of the Building Code.

ACTUAL OCCUPANT LOAD - The number of students allowed by TEA in an educational space plus the maximum number of staff assigned to those students. This may be increased by a proposed simultaneous use that adds more people.

Instructions: Use these instructions to complete the Occupant Load Calculation of Part I. Application.

1. Enter the name of the school and district for which the request is being made.
2. Enter the project address as it appears on the building permit application. Enter mailing address.
3. Enter the name and email of the person requesting the occupant load reduction.
4. Enter the name and email of the district representative.
5. Enter today's date.
6. Enter the project number.
7. Enter the phone number and fax number of the person requesting the occupant load reduction.
8. Enter the phone number and fax number of the district representative.
9. Enter the total number of buildings. Only 1 (one) building is allowed per request, unless they are temporary buildings.
10. Enter the number of classrooms.
11. Enter the Design Occupant Load, calculated by Section 1004.1.1 of the Building Code.
12. Enter the value assigned by TEA.
13. Enter the number of staff assigned to this school by the district.
14. This is an optional additional number of persons, groups or organizations that will be using the school simultaneously- during school hours. Enter the number of additional persons that would be using the school in the box.
15. Enter the sum of boxes 10, 11, and 12 (if used).

PART III. FEES

STANDARD REQUEST $67.09 ($41.29 + $25.80 Administrative Fee)

FOR OFFICE USE ONLY

Approving Initials: _____ _____ Building Official: _____Date: _____ Receipt # _____

CITY OF HOUSTON

HOUSTON PLANNING COMMISSION — PLANNING & DEVELOPMENT DEPARTMENT

DEVELOPMENT SITE PLAN REVIEW FORM

KNOWN AS DEVELOPMENT PLAT APPLICATION IN ORDINANCE # 1999-262

☑ To expedite this application, please complete entire application form.

1. PROJECT NAME: _____ Staff Initials

2. SITE ADDRESS: _____

3. SUBDIVISION: _____ Date

4. LOCATION: ☐ Urban Area ☐ Suburban Area

5. PROJECT INFO.:

☐ Inside city limits

☐ ETJ

Project no.: _____ Survey: _____

Lambert: _____ Census Tract: _____ Abstract no.: _____

Key Map: _____ Zip Code: _____ City Council District: _____

County: _____ Utility District: _____

6. GEOGRAPHIC:

North of: _____ East of: _____

South of: _____ West of: _____

7. TOTAL ACREAGE: _____

8. CONTACTS:

Developer: _____

Address: _____ Phone: _____ Fax: _____

City: _____ State: _____ Zip: _____

Applicant: _____

Address: _____ Phone: _____ Fax: _____

City: _____ State: _____ Zip: _____

9. SUBMITTAL REQUIREMENTS

One copy of completed application form ☐

Two copies of sealed and certified survey in Building Plans ☐

Two copies of site plan in Building Plans ☐

Two copies of recorded subdivision plat in Building Plans ☐

Filing fee (**$485.00** payable to "City of Houston") ☐

_____ _____

Applicant's Signature **Date**

CITY OF HOUSTON
DEPARTMENT OF PLANNING & DEVELOPMENT

LANDSCAPE ANALYSIS FORM

(Please attach to permit site plan)

Non-Single Family Residential
(*Staff may create an artificial lot*)

1. TREE AND SHRUB PLANTING REQUIREMENTS

A. STREET TREES: Sec. 33-126 (a)

Length of property line in lineal feet as measured along each street separately.

STREET NAME	Lineal Feet	Tree Planting Requirement	Equivalent Credits *	Total Trees Planted
	/ 30			
	/ 30			
	/ 30			
	/ 30			
		TOTAL STREET TREES		

***** *Maximum street tree credits can not exceed 50% of each block face.*

B. PARKING LOT TREES: Sec. 33-127 (a)

50% of parking lot trees must be large trees
Each parking space must be within 120' of a tree.

Tree Planting Requirements for Parking Lots						
Total Number of Proposed Parking Spaces	# of Spaces	Tree Planting Requirement	Equivalent Credits	Large Trees	Small Trees	Total Trees Planted
	/ 10					

C. SHRUBS: Sec. 33-127 (b)

75% of the shrubs must be planted along the perimeter of the parking lot.
(Shrubs are required for new and/or the expanded portion of parking lots)

Shrub Requirements		
Street Tree Planting Requirement	Requirement	Total Shrub Requirement
	X 10	

D. LANDSCAPE BUFFER: Sec. 33-128 (1) Wood, concrete masonry opaque screening fence. (Min. 6') Sec. 33-128 (2) Evergreen screening.

A 6' high wood, concrete masonry opaque screening fence, or 15' wide evergreen planting strip along the total length of property line adjacent to existing single family residential, or limit of expansion adjacent to existing single family residential.
(Site plan must show land use on all sides of the property)

CREDITS WORKSHEET Sec. 33-123 (a) TREE PLANTING EQUIVALENCY CREDITS:

	STREET	PARKING
1. Number of proposed trees exceeding 4" in caliper _____ . Each 4" tree is one (1) credit.		
2. Depositing of monies with Parks and Recreation Department. $500.00 per tree. Proposed credits cannot exceed 30% of tree planting requirement above. **Amount to be deposited: Proposed credits _____ x $500.00 = $ _____.** ***The combined credits under items 1 & 2 may not exceed 50% of total tree planting requirement.***		
3. Preservation of on-site trees, per the following schedule in caliper: **minimum 4" to 6" 2 trees** **greater than 6" but less than 12" 3 trees** **12" and greater 4 trees** **Total number of tree credits for this option. _____ trees.**		
4. Credit for preserving existing right of way street trees.		
5. Proposed total number of tree credits. ***(To receive credits, documentation must be provided in conformance with Section 33-122)***		

PLEASE ATTACH TO PERMIT SITE PLAN

2. TREE PROTECTION REQUIREMENTS

Sec. 33-105 Removal of protected trees.

Protected Tree Replacement Requirements					
Street Name	Inches Protected	Replacement Method			Inches Replaced
		Replant inch for inch	*Buyout Per caliper inch	Preserve inch for inch (Division 2 only)	

*** Must have TREE REMOVAL PERMIT from the Urban Forestry Division of the City of Houston Parks Department.**

Sec. 33-130 Preservation of existing trees and associated understory.

(a) The following procedure shall be required where credit for the preservation of existing trees and associated understory is being requested to be applied toward the total planting requirement pursuant to section 33-123(a) of this Code or the protected tree replacement requirement. Where such credit is being requested, the applicant shall also supply to the building official for review with the building plans a tree and associated understory preservation plan and shall include:

(1) Delineation of proposed limit of clearance and establishment of tree protection zones which shall extend to outside the dripline of the tree and associated understory to be protected, if any;
(2) Proposed soil stabilization practices, i.e., silt fence, hay bales;
(3) The species of each tree to be preserved and for which credit is being requested;
(4) The proposed finished grade and elevation of land within six feet of or within the dripline of any tree to be preserved, whichever is greater, shall not be raised or lowered more than three inches unless compensated for by welling or retaining methods;
(5) Existing and proposed location of all trees and plant materials to be relocated at the drawing scale;
(6) A landscaping tabulation, and itemized credit requests for existing trees to be preserved which have a minimum of four inches in caliper and greater;
(7) Tree and associated understory preservation details; and
(8) Specification of ground plane treatment as either turf or sod. If a combination of both is utilized, the limit of each shall be indicated.

(b) The following tree relocation information shall be provided on the landscape plan or in a report for the transplantation of existing specimen trees when preservation credit is being requested for them. This information shall include an assessment of the cost of transplanting the trees as opposed to the potential mortality rate which may result from the attempted transplantation. If relocation is elected, the following information shall be provided:

(1) Transplanting techniques;
(2) Equipment to be utilized;
(3) Locations of existing trees and proposed locations for transplanted trees;
(4) Genus, species, caliper, height and general condition of the existing tree;
(5) Pruning and maintenance schedule and methods to be followed; and
(6) Which form of assurance of performance will be provided, i.e., executed contract, bond or assigned certificate of deposit.

(c) If preservation credit is requested, the trees shall be protected and preserved as set forth in appendix C.

(d) The department shall make recommendations to minimize damage to existing vegetation during the site construction phase. The department shall also suggest possible uses for those trees removed as a result of development such as the creation of wood chip mulch from removed hardwood trees.

CITY OF HOUSTON
Health & Human Services Department
(832-394-8848 or 832-393-5122)

FOOD INSPECTION REQUIREMENTS FOR SUBMISSION OF PLANS

SUBMISSION OF PLANS: Submit two sets of properly prepared plans and specifications to the Commercial Plan Review office at 1002 Washington Ave. These plans and specifications shall include a floor plan with a proposed equipment layout, elevations of food service equipment, and a detailed room finish schedule. (Section 20-25a)

1. EQUIPMENT
Equipment shall be located in a way that facilitates cleaning the establishment and prevents food contamination. Floor mounted equipment, unless readily movable, shall be sealed to the floor, or installed on a raised platform of concrete, or elevated on legs to provide at least a six inch clearance between floor and equipment. Unless sufficient space is provided for easy cleaning between and behind each unit of floor mounted equipment, the space between it and adjoining equipment units and between it and adjacent walls shall be sealed to the adjoining equipment or adjacent walls. Aisles and working spaces between units of equipment and walls shall be unobstructed and of sufficient width to permit employees to perform their duties without contamination of food or food contact surfaces by clothing or personal contact. (Section 20-21, Item 10)

2. PLUMBING
The potable water system shall be installed to preclude the possibility of backflow. A hose shall not be attached to a faucet unless a backflow prevention device is installed. Grease traps, if used, shall be of an approved type and size and in approved area outside the building. Except for existing, properly trapped open sinks, there shall be no direct connection between sewage system and any drains originating from equipment in which food or utensils are placed. (Section 20-21, Item 17)

3. CLEANING AND SANITIZING
All food establishments shall have a 3 compartment sink in addition to the required hand sinks. Sinks shall be large enough to permit the complete immersion of the utensils and equipment. Each compartment of required sink shall be no less then 15" x 15" x 12" (L x W x D) with all rounded internal angles and corners. A drain board or similar equipment of adequate size shall be provided. (Section 20-21, Item 11/12) Only establishments providing pre-packaged food and beverage items only are exempt from the 3 compartment sink requirement.

4. HANDWASHING SINKS
Hand washing sinks shall be located to permit convenient use by employees in the food preparation areas and utensil washing areas. There shall be no more than 20 feet travel distance between any work area and the nearest hand sink. Hand washing sinks are to be accessible to employees at all times. Hand washing sinks are required in the rest room or the vestibule. Each hand washing sink shall be provided with hot water at 100^{o}F and cold water tempered through a mixing valve or combination faucet. (Section 20-21, Item 19)

5. FLOORS
The floors of the food preparation areas, food storage areas, utensil washing areas, dressing areas, locker rooms, and toilet rooms shall be constructed of smooth, durable materials. Floor drains shall be provided in floors that are water flushed for cleaning or in areas where pressure spray methods for cleaning equipment are used (except inside a walk in refrigeration unit). Such floors shall be constructed only of sealed, smooth concrete, terrazzo, ceramic tiles, or similar materials and shall be graded to drain. In all new or remodeled establishments where water flush cleaning methods are used, the junctures between walls and floor shall be covered and sealed. In any new or remodeled establishment, installation of exposed utility lines and pipes on the floor is prohibited. (Section 20-21, Item 22)

6. WALLS AND CEILINGS
The walls and ceilings of food preparation areas, food storage areas, equipment and utensil washing areas, toilet rooms, and vestibules shall be smooth, nonabsorbent, easily cleanable, and light colored. Specific colors must be provided on the plans. Studs, joists, and rafters shall not be exposed in these areas. Utility service lines, pipes, and water heaters shall not be exposed on walls and ceilings in these areas. A ceiling in retail food stores, warehouses where only packaged foods, and/or single use articles are stored or displayed shall be smooth, nonabsorbent, easily cleanable, and light colored (specify color). If exposed in areas where allowed in previous sentence; HVAC ducts shall be smooth, rigid metal designed with a circular cross-section. (Section 20-21, Item 23) Wall areas adjacent to food preparation areas and utensil washing areas shall have a smooth, hard, nonabsorbent surface of a type that is not adversely affected by moisture such as FRP (Fiberglass reinforced polyester), stainless steel, ceramic tiles, high-pressure decorative laminate or equal.

7. TOILETS
Toilet facilities shall be accessible to employees at all times. Toilet facilities must be located within the establishment and have inside access. Toilet rooms shall be completely enclosed and have solid, tight fitting, self-closing doors. Toilet rooms shall not open directly into any room in which food, drinks or utensils are handled. (Section 20-21, Item 18) Walls within a water closet compartments and walls two feet past sides of urinals and hand sinks, to a height of 4 feet from the floor up, shall have a smooth, hard, nonabsorbent surface of a type that is not adversely affected by moisture (See walls and ceilings above for recommended materials.) (Section 20-21, Item 23)

8. LIGHTING
At least 50 foot-candles (540 lux) of light shall be provided at surface where employees may be working with food or utensils. At least 20 foot-candles (220 lux) of light shall be provided at surface where food is provided for consumer self-service, where fresh produce or packaged foods are sold or offered for consumption and inside equipment. At least 20 foot-candles (220 lux) of light shall be provided at a distance of 30 inches above the floor in areas used for hand washing, toilet rooms, and equipment and utensil storage. 10 foot-candles (110 lux) of light shall be provided at a distance of 30 inches above the floor in walk-in refrigeration units and dry food storage areas and in other areas and rooms during periods of cleaning. Lights shall be shielded, coated. Or otherwise shatter-resistant in areas where there is exposed food, clean equipment, utensils, linens, or unwrapped single-service or single-use articles. (Section 20-21, Item 24)

9. INSECT AND RODENT CONTROL
Openings to the outside shall be effectively protected against the entrance of pest by closing holes and other gaps along floors, walls, and ceilings. Tight-fitting, self-closing doors, which are kept closed; closed windows, screening (16 mesh), or properly designed and installed air curtains to control flying insects. (Section 20-21, Item 21)

10. VENTILATION
All rooms shall have sufficient ventilation to keep them free of excessive heat, odors, smoke, and fumes. In all new or remodeled establishments; all rooms from which obnoxious odors, vapors, or fumes originate shall be mechanically vented to the outside. When such ventilation may result in the deposition of particulate matter or liquids within the ventilation system; ventilation hoods and ventilation equipment shall be equipped with effective, easily removable, easily cleanable filters. (Section 20-21, Item 25)

11. UTILITY FACILITIES
In new or remodeled establishment at least one utility sink or curbed cleaning facility with a floor drain shall be provided and used for the cleaning of mops or similar wet floor cleaning tools. (Section 20-21, Item 23)

12. GARBAGE
Garbage and refuse containers, dumpsters, and compactor systems shall be stored on or above a smooth surface of nonabsorbent material such as concrete or machine laid asphalt. (Section 20-12, Item 20)

13. POISONOUS OR TOXIC MATERIALS
Each of the three categories of poisonous or toxic materials shall be stored and located to be physically separated from each other. All poisonous or toxic materials shall be stored in cabinets or in similar compartments used for no other purpose to preclude potential contamination. Poisonous or toxic materials shall not be stored above food, food equipment, food utensils, or single service articles. (Section 20-21, Item 27)

14. LAUNDRY FACILITIES
Laundry facilities; if provided shall be restricted to washing and drying of items necessary to the operation. Separate room shall be provided for laundry facilities except that laundry operations may be conducted in storage rooms containing only packaged foods and/or packaged single service articles. (Section 20-21, Item 28)

15. DRESSING AREAS AND LOCKER ROOMS
If employees routinely change clothes within the establishment; rooms shall be designated and used for that purpose. These designated rooms shall not be used for food preparation, food storage or service, or for utensil washing. Lockers may be located in packaged food and/or single service article storage rooms. (Section 20-21, Item 26)

16. ACCESS TO RESTROOMS
The traffic of unnecessary persons through the food preparation and utensil washing areas is prohibited. (Section 20-21, Item 28)

NOTE: Public restrooms are required by Section 2902 of the Houston Building Code. These restrooms must be accessible to the public, without the customers passing through the kitchen, food preparation, or utensil-washing areas.

INSTRUCTIONS:

FOR ADDITIONAL INFORMATION PLEASE CALL:

PLAN CHECKING SECTION: 832-394-8848
After obtaining an approved set of blueprints, contact the pre-opening section to set up an inspection appointment before operating the business.

PRE-OPENING INSPECTIONS: 832-394-8848 or 832-393-5122