RiverTown Crossings

TENANT CRITERIA MANUAL

GRANDVILLE, MICHIGAN



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MECHANICAL DESIGN CRITERIA HVAC drawing requirements Landlord supplied HVAC at tenant's expense Design Parameters **ELECTRICAL DESIGN CRITERIA** Electrical drawing requirements Landlord supplied electrical/ telephone PLUMBING DESIGN CRITERIA Plumbing drawing requirements Landlord supplied domestic water, sanitary, grease & gas FIRE PROTECTION ALL TENANTS 72 FIRE ALARM DESIGN CRITERIA Fire alarm drawing requirements Landlord supplied fire alarm Design parameters





RIVERTOWN CROSSINGS MALL



This manual has been prepared to assist the tenant's architect and engineer(s) prepare drawings and specifications that will meet the RiverTown Crossings design criteria. Our objective is to allow the maximum expression of a store's individual personality and character while maintaining a cohesive design theme throughout the center.

The criteria herein are not intended to contradict any code requirements that may govern this project. It is the responsibility of the tenant's architect, engineers and contractors to comply with all applicable codes. Any questions concerning the information presented in this manual should be brought to the tenant Coordinator's attention as soon as possible to minimize design revisions.

The Tenant Print Package, ("Print Package") consists of:

- Tenant Design Criteria Manual.
- Tenant Plan (see attached plan).

The lease agreement requires that all tenant plans be prepared by an architect and engineer(s) licensed by the State of Michigan.

Please submit the following information:

Send to: Gener

General Growth Properties, Inc.

Attn: Tenant Coordination Department

110 N. Wacker Drive Chicago, IL 60603-5060 Phone: 312/960-5000 Fax: 312/960-5064

Store Name:	Space No	
Architectural Firm:	·	
Contact:		<u>-</u>
Address:		
Phone:_()	Fax: ()	



PROJECT DIRECTORY

Center:

RiverTown Crossings Mall Phone: 616-257-5000 3700 Rivertown Parkway Fax: 616-257-0507

Grandville, MI 49418

Landlord:

GGP - Grandville L.L.C. ("Landlord")

Landlord's Tenant Coordination:

General Growth Properties, Inc. Phone: 312-960-5000 110 N. Wacker Drive Fax: 312-960-5064

Chicago, IL 60606

Attn. Tenant Coordinator

Landlord's Structural Engineer:

Phone: 617-737-0040 McNamara / Salvia 160 Federal St., 16th Floor Fax: 617-737-0042

Boston, MA 02110 Attn. Mathew Kamin

Landlord's Insurance Underwriter:

Factory Mutual Engineering Association Phone: 616-954-0297 Fax: 313-432-6548

2538 Bretoncreek Drive, S.E.

Kentwood, MI 49512 Attn. John T. Job, P.E., Loss Prevention Specialist.

City of Grandville Permitting Officials:

Department of Inspection

Contract Services

Professional Code Inspectors of MI, Inc.

1575 142nd St. Dorr, MI 49323 Mr. Chuck Dyk

Fire Department

City of Grandville 3145 Wilson Ave. Grandville, MI 49418

Fire Chief Harvey L. Veldehouse

Kent County Health Department

Environmental Health 700 Fuller Ave., NE Grand Rapids, MI 49503

Mr. Al Kramer

Local Utility Agencies:

MichCon Gas

333 Bridge Street NW

Grand Rapids, Michigan 49501

444 Wealthly St.

Grand Rapids, Michigan 49501

Ameritech

3743 Omaha SW

Grandville, MI 49418

Consumers Energy

4000 Clay Avenue SW

Grand Rapids, MI 49501

TCI Cablevision of West Michigan, Inc.

3500 Patterson Avenue SW

Grand Rapids, Michigan 49512

Phone:

616/877-2000

Fax:

616/877-4455

Phone: Fax:

616/530-6211

616/538-7553

Phone:

616/336-3089

Contact:

Pat Drobot

Marketing/Sales

Phone:

616/776-2885

Fax:

616/776-2877

Contact:

Gary Baldyga

Construction Spc.

Phone: 616/265-4159

800/562-6194 x 4159

Contact

Phone:

Curtis Kortman

616/534-4433

Contact:

Phone:

616/530-4117

Fax:

616/530-4014

Leon Wysocki

Contact: Phone:

Preston Berthold 616/977-2200

Fax:

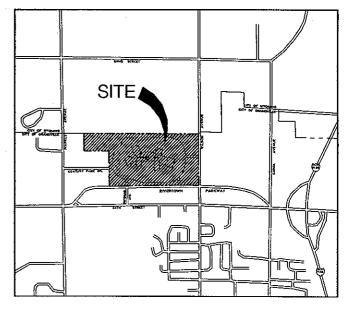
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ADDENDUM

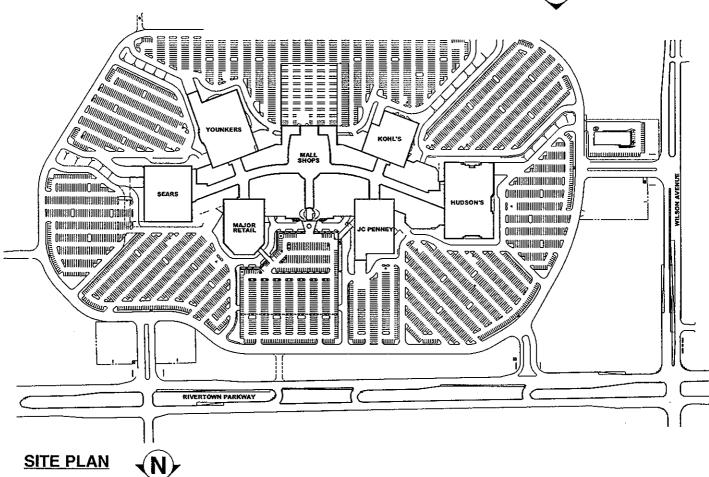
All tenants shall contact Granite Grid for activation of phone/internet service. The Granite Grid Sales and Service team can be reached at 1-844-735-5473 or http://www.granitenet.com/grid.

Rivertown Crossings is at the juncture of Rivertown Parkway and Wilson Ave. in the City of Grandville. Rivertown Parkway intersects with Interstate 196, less than a mile west of the site. U.S. Highway 131, approximately three miles east of the site, provides regional north/ south access.



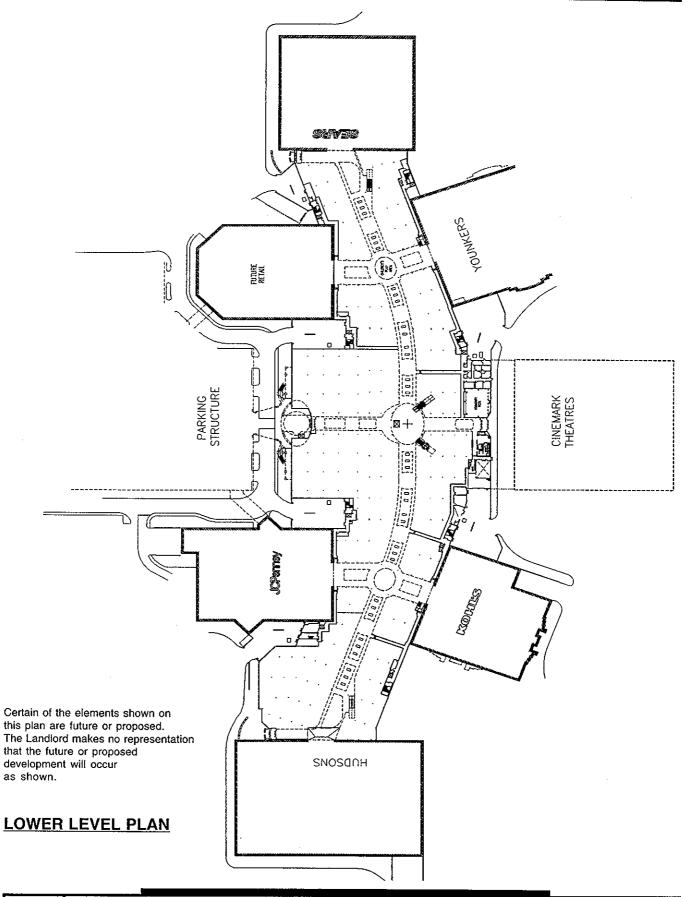
LOCATION PLAN



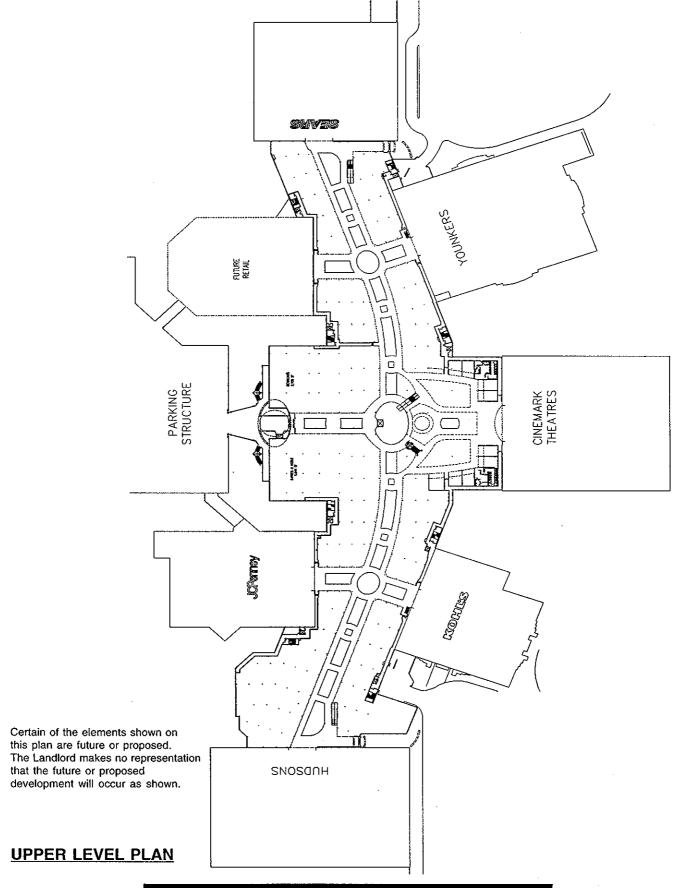














TENANT SUBMISSIONS AND PERMIT REQUIREMENT

LANDLORD'S ADDRESS FOR DOCUMENT SUBMISSION

General Growth Properties, Inc. Attn: Tenant Coordination Department 110 N. Wacker Drive Chicago, IL 60606

Phone:

312/960-5000

Fax:

312/960-5064

DOCUMENT SUBMISSION

Please keep in mind that submission of plans must be in accordance with the time schedule specified in the lease. Sufficient time must be allowed for Landlord's and City of Grandville Department of Inspections review and approval process. Preliminary Landlord plan approval will take approximately 5 working days or less. Final Landlord plan approval will take approximately 10 working days or less.

The City of Grandville review will take approximately 15 working days. The City of Grandville Department of Inspections will not review final plans unless they have been stamped/approved by Landlord.

Preliminary Documents:

One sepia indicating:

- Key plan.
- Floor plan.
- · Storefront elevation.
- Reflected ceiling plan.
- Material sample board (labeled and keyed to plan).
- Color rendering or photograph of storefront prototype.

Final Construction Documents:

- Two direct reading reproducible and one blue line set of construction documents on 24" x 36" format to scale (containing Architectural, Mechanical, Electrical, Plumbing, drawings).
- Drawing must be wet sealed and signed by Michigan licensed architect and engineer(s).
- Refer to appropriate section in this manual for drawing requirements.

Note: After Landlord's approval, any changes or modifications to the construction documents or tenant's interior improvements must be approved by Landlord in writing.



Hood Documents:

• Three sets of hood specification plans (for food related tenants).

Signage Documents:

- One set of reproducible signage shop drawings.
- One set of reproducible blade sign shop drawings (excluding food court tenants).

REQUIRED PERMITS AND INSPECTIONS

Permits required by the City of Grandville must be presented to the Landlord's on-site representative prior to work start. It is the responsibility of the tenant to obtain the approved construction documents from the Department of Inspections, Bureau of Fire Prevention and Health departments, etc., and to pay for and secure all applicable permits.

Permits:

- Building construction
- Fire
- Health
- Sprinkler

Note: All interior tenant store signage shall be submitted to Landlord for approval. Exterior building store signage will require both Landlord's and the City of Grandville Department of Inspections approval. A separate permit will be required for exterior signs only.

Inspections:

It is the tenant's architect's or contractors' responsibility to verify the field inspections required by the City of Grandville.



BUILDING CODE INFORMATION

The following is a general reference list of applicable codes. It is the sole responsibility of the tenant's architect, engineer(s) and contractor(s) to comply with all applicable federal, state, local codes and ordinances for their occupancy type.

Building Type:

Center Two level regional shopping center of approximately 1.2 million square feet of

gross building area.

Covered center building Type 2C non-combustible, fully sprinklered construction;

mercantile, with business, storage and assembly use groups.

Tenant Mercantile use group M with storage.

Applicable Codes:

Building 1993 BOCA National Building Code

Amended by the State of Michigan Barrier Free Law

Mechanical 1993 BOCA Mechanical Code

Plumbing 1990 State of Michigan Plumbing Code with Amendments

Electrical 1993 Electrical Code Fire Code NFPA - Current Edition

Life Safety 1994 NFPA 101 Life Safety Code

Building Permit

Requirements: 3 sets of Plans (all M.E.P. information must be included)

3 sets of Specifications

Fire Department to receive 1 set of the above documents.

All documents are to be signed and sealed with cover sheet embossed.

GENERAL REQUIREMENTS:

Tenant shall cause its general to deposit with Landlord without liability for interest, the sum of \$2,500.00. This sum shall be applied toward any costs incurred by Landlord or Landlord's contractor to complete any part of Tenant's work which Tenant or Tenant's contractor fails to complete within the time period required by the Lease.

Tenant's contractor shall erect at Landlord's option, a 4'-0" high (min.) barricade to serve the tenant's area. This barricade can extend into the mall area 4'-0", only when working on the storefront (2 weeks maximum).

All material must be kept within the leased area. No storage of equipment or materials in unoccupied spaces, mall property or parking lot areas.

Loading space is from access corridors, not through store front.



CONTRACTOR'S GUIDELINES:

The following is a brief description of required items/procedures for tenant construction. Note that this is not a complete description of all requirements and limitations for Tenant Construction. Tenant's Contractor shall obtain a "Tenant's Contractor Manual" at the site from an authorized GGP representative for further guidelines.

Quality Standards:

All work by Tenant's Contractor including repair work, shall be performed in a first-class workmanlike manner and shall be in a good and usable condition at completion. Tenant shall require any person performing work to guarantee that the work is free from any and all defects in workmanship and materials for 1 year from the date of completion. Tenant shall also require any such person to be responsible for the replacement or repair without additional charge of work done or furnished by or through such person which shall become defective within 1 year after substantial completion of the work. The correction of work shall include, without additional charge, all expenses and damages in connection with the removal, replacement or repair of any part of work which may be damaged or disturbed. All warranties or guarantees for materials or workmanship on or regarding Tenant's Work shall be contained in the contract or subcontract. The contract shall be written so that all warranties and guarantees shall inure to the benefit of both Landlord and Tenant, as their respective interests appear, and so that the contract can be directly enforced by either party.

Coordination:

Tenant's Work shall be coordinated with Landlord's Work as well as with the work of other tenants in the Shopping Center, so that Tenant's Work shall not interfere with or delay completion of other construction in the Shopping Center.

Insurance:

Tenant's contractor must fulfill the following insurance requirements, and shall maintain at no expense to Landlord:

- Workers' Compensation Insurance with statutory limits and Employer's Liability Insurance with limits
 of not less than \$100,000.
- General Liability Insurance with limits of not less than \$2,000,000 combined single limit for bodily injury
 and property damage, including personal injury, Contractual Liability coverage specifically endorsed to
 cover the indemnity provisions contained herein and Contractor's Protective Liability coverage if
 contractor uses subcontractors.
- Motor Vehicle Liability Insurance in the Contractor's name, including owned, non-owned, leased and hired car coverage with limits of not less than \$2,000,000 combined single limit per occurrence for bodily injury and property damage.



The following is a list of minimum design information required to expedite plan approval by Landlord. It is not intended to be a complete listing of all requirements, but should serve as a minimum checklist to be used by tenants design consultants to complete the construction documents.

We urge you to read this manual in its entirety in order to fully understand the requirements needed to generate an acceptable set of construction documents.

ARCHITECTURAL DRAWING REQUIREMENTS

Cover Sheet:

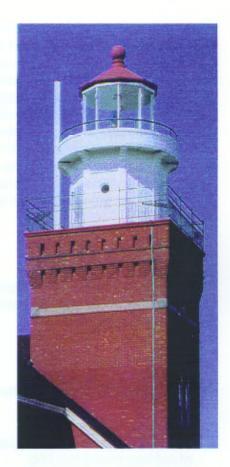
- Tenant name.
- Project directory.
- Location plan with space number (refer to page 6 & 7).
- · Leased square footage.
- Architectural symbols list.
- Drawing list.
- Building code information (refer to page 10).
- Occupancy load.
- Building data, use and construction type.
- Flame spread ratings of materials (as per code).
- Landlord provided notes (refer to page 13).

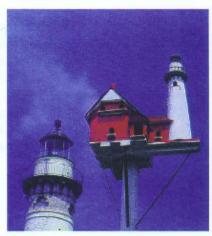
Floor Plans:

- Demising and interior partition wall locations dimensioned.
- Restroom facilities.
- Location of fixtures and equipment.
- Recessed service door (if applicable) (refer to page 36).
- Location of access panels in floor (if applicable).
- Identification of waterproof membrane locations.
- · ADA path of egress indicated.
- · Door and room finish schedules.
- Typical wall sections.

Storefront Interior Elevations and Details:

- Storefront entry elevation.
- Interior store elevations.
- Identification of finishes and colors.
- Longitudinal and typical section through storefront from slab to roof.
- Typical section through demising walls.
- Storefront signage.
- Neutral pier and bulkhead details (refer to page 23).
- Floor transition details (refer to page 39).
- Door frame details.
- · Blade signage (refer to page 41).







Reflected Ceiling Plan:

- Ceiling heights.
- Identification of ceiling materials.
- Exit lights.
- Emergency lights.
- · Light fixtures.
- Sprinkler heads.
- Air diffusers and grilles.
- Access panels.

SIGNAGE DRAWING REQUIREMENTS

- Incorporate signage into storefront elevation.
- Indicate letter height.
- Provide typical letter section.
- Method of wiring and mounting.
- Indicate color and materials.
- Blade sign (excluding food court tenants).

Landlord Provided Notes:

The following Landlord notes must appear on the cover sheet of all tenants final construction documents:

- Tenant's general contractor must check in with Landlord's on site representative prior to work start.
- Tenant's contractor will repaint and/ or repair Landlord's property, (neutral piers, bulkheads, rear corridor, etc.) damaged during tenant improvement.
- All ceiling material must have class "A" fire rating.
- Support wires for lay-in-ceiling grid, lights, HVAC equipment, etc. must not be connected to any of Landlord's electrical & plumbing & fire protection piping, mechanical equipment or roof.
- All support wires may only be connected to top cord of joist and/ or structural members.
- All materials used in the construction of this space must be asbestos free.
- Food related tenants and upper level tenants with bathrooms shall provide a water proof membrane in wet areas. Water test must be witnessed by on-site GGP, Inc. authority.
- Water meter with cubic feet readout (for large restaurants only, all other tenants do not have water meter), to be located in toilet room accessible to Landlord. Water meter must be easily readable by person standing on main floor. If mounting position is not accessible, remote display must be used. If either are concealed, location must be labeled.
- Tenant's mechanical contractor to contact on-site representative for required interfaces to Landlord's control systems at tenants expense.
- Do not channel cut slab on upper level. Core drill only and install supplemental support framing.
- Any penetration or modifications to structural steel or concrete must be coordinated and approved by General Growth Properties, Inc. on-site representative.



LANDLORD SUPPLIED ARCHITECTURAL ITEMS

Control Zone:

1 1/2" black metal neutral strip between adjacent tenants, at tenants expense.

Demising Wall Studs:

6" 22 gauge metal studs @ 24" on center to deck, provided at the centerline of all demising and corridor walls.

Roof Structure:

EPDM roofing membrane system mechanically attached to deck. Rigid insulation.

3" metal deck at 20 gauge over structural steel beams, girders and joists.

Note: It is tenant's responsibility to maintain the integrity of Landlord's demising walls, floor slab and roof structure.



DESIGN PHILOSOPHY

The following criteria are provided to give the tenant maximum design flexibility while maintaining a consistent and high quality retail environment at Rivertown Crossings. This criteria will guide the tenant's designer to create a store design compatible with the overall design intent of the center.

All storefront, interior designs and materials are subject to Landlord's approval. It should be understood that Landlord will review a tenant design concept with neighboring tenants and make judgments that will benefit the entire center.

General Tenant Design Constraints:

- Landlord will provide a minimum 12'-0" height clearance throughout tenants space. Any alterations to Landlord's structure or utilities as a result of ceiling height increase shall be at tenant's expense.
- Tenant's storefront must be self supported. Storefronts shall not be suspended from center soffit.
- Wood blocking, decking, and framing is allowed below the ceiling line and must be stamped fire retardant. All raised platforms shall be constructed of noncombustible materials.
- No combustible's above ceiling (i.e., transformer, water heaters, etc.).
- Provide 2" high black vinyl store space number, locate at lower right hand corner of storefront.
- Provide 2" high black vinyl store space number and name, at rear exit door.
- Waterproof membrane is required for all food related and upper level tenants with bathrooms.
- All floor penetrations must be sleeved and sealed liquid tight.
- Do not channel slab on upper level. Core drill only and install supplemental support framing as required.
- All tenants are required to have one handicap accessible toilet.
- Support wires for lay-in-ceiling grid, lights, HVAC equipment, etc. must not be connected to any of Landlord's mechanical, electrical plumbing or fire protection piping, equipment or roof.
- Any penetrations or modifications to structural steel or concrete must be coordinated and approved with local General Growth Properties, Inc. on site representative.
- It is the responsibility of the tenant's architect to field check all dimensions, utilities locations and conditions prior to and during construction
- A second exit is required if exit travel distance exceeds 75' within space or occupancy exceeds 50 people or space is greater than 1500 SQ. FT. (as per code).
- Tenants that are adjacent to service corridor must provide an alcove so that an exit door is fully recessed behind the lease line when in the open position. Tenant must match service corridor finishes established by Landlord throughout corridor side of alcove and provide sprinkler coverage.
- Tenants with second exits (i.e., through stockrooms) are required to mark a path of egress and provide fixed barriers to meet requirements of NFPA 101.
- Key plates must be concealed from public view.
- Totally open storefronts are prohibited.
- Sliding vinyl accordion doors are prohibited.
- All storefront glass and glazing shall be tempered, beveled polished edges and shall be set with 1/8" open butt joints between panes. Silicon joints fillers are not permitted.
- Glass storefront systems that exceed 10'-0" in height must be a minimum of 3/4" thick. Architectural glazing clips are required.

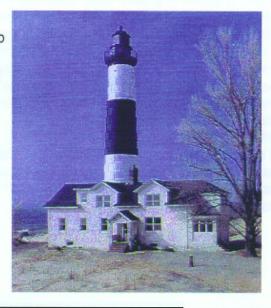


STOREFRONT DESIGN CRITERIA

Storefronts shall be designed, fabricated and installed by tenant at tenant's sole expense. Storefronts should be predominantly glass and emphasize well-designed architectural elements, a sense of entry and imaginative show window displays.

Storefront:

- Opening cannot exceed 50% of the total storefront width or a minimum of 6'-0".
- Closure shall occur at or behind the lease line.
- One entrance per elevation is permitted.
- Entry height shall be a minimum of 9'-0" above finished floor.
- · Swing doors are to be single acting in the direction of egress.
- Doors shall be fully recessed behind the lease line when in the open position.
- Door stops must be flush floor mounted.
- Single track, narrow style sliding glass doors shall be enclosed in a door pocket or partition when in the open position.
- Door tracks are to be recessed flush with the finish floor.
- Storefront doors must be equipped with emergency quick release locks as required by code.
- Key plates must be concealed from public view.
- Totally open storefronts are prohibited.
- Sliding vinyl accordion doors are prohibited.
- Storefront must be self supporting.
- All storefront glass and glazing shall be tempered, beveled polished edges and shall be set with 1/8" open butt joints between panes. Silicon joints fillers are not permitted.
- Glass storefront systems that exceed 10'-0" in height must be a minimum of 3/4" thick. Architectural glazing clips are required.
- Provide 3/4" black metal channel reveal across the horizontal portion of the storefront, from Landlord's neutral strip to neutral strip.
- All storefronts, excluding doors, shall have a minimum 4" high approved durable base. Mall tile base is recommended.
- Storefronts are to be self-supporting. Attachment to Landlord's structure for lateral bracing only.
- Tenant's contractor to provide 1hour rated smokstop 5/8" gypsym board on the tenant side of storefront bulkhead, extend to deck above and seal (see page 31 for typical detail).



Acceptable Storefront Materials:

Glass:

- Clear tempered with polished and beveled edges.
- · Glass block.
- · Sandblasted or stained glass.

Laminates:

- Corian or equal.
- Solid core.
- Vitracore or equal.
- Matrix or pattern finishes.
- Matt, and textured finishes.

Metals:

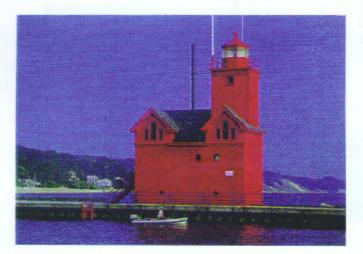
- Anodized aluminum.
- Brass.
- Bronze.
- Copper.
- Electrostatic colors.
- Stainless steel.
- · Polished, brushed or textured.

Tile:

- Ceramic, mosaic tile.
- Glass fiber reinforced gypsum.
- Polished or honed cut stone (i.e., marble, granite, terracotta etc).
- Terrazzo.

Wood:

· Finish grade hard woods painted or stained.



Unacceptable Storefront Materials:

Glass:

- Mirror.
- Plexiglas.

Laminates:

- · Simulated materials; brick, stone, wood, etc.
- Wood veneer laminates.

Metals:

- Antique.
- Unfinished.

Tile:

- · Clay shingles.
- Simulated masonry and stone.
- Vinyl tile.

Wood:

- Distressed wood.
- Masonite.
- Plywood paneling.
- Unfinished Wood.
- Painted gypsum board.



CONTROL ZONE CRITERIA

The front 5'-0" area from the storefront lease line has been designated as a control zone area. All tenants must comply with these requirements.

Neutral pier:

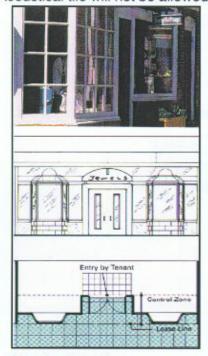
 A minimum of 3 inches of opaque material or glass receiving frame will be required adjacent to Landlord's neutral strip (refer to page 23).

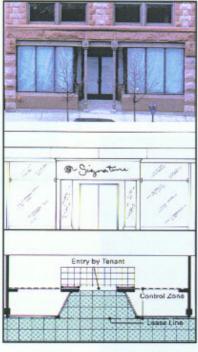
Floor:

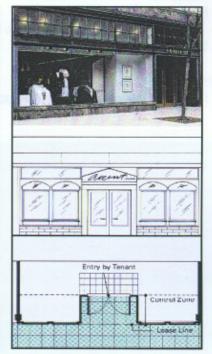
- Provide a smooth and level transition from tenant's space to common area.
- Tenant must match mall border tile from lease line to tenant's storefront line and/ or closure line.
- Provide 4'-0" minimum of hard surface transition flooring material past the point of entry.
- Tenant's contractor shall purchase mall tile at the site from LL's General Contractor.

Ceilings:

- Ceiling elevations should vary within the 5'-0" control zone.
- Locate exit sign behind ceiling soffit so as not to be seen from the centers common area.
- Recessed incandescent down lights shall be used in the control zone.
- Track type lighting is prohibited unless concealed.
- Sprinkler heads in ceiling must be flush or fully recessed, cover plates to be chrome or match ceiling color.
- Acoustical tile will not be allowed in control zone area.







Storefront Entries

STORE INTERIOR DESIGN CRITERIA

Tenants are encouraged to provide a high quality, well detailed and unique interior environment. The interior and storefront design should reflect and complement one another. The use of quality materials for flooring, walls, ceiling and lighting will accomplish this task.

Floors:

- Tenant is responsible for installing all finished floor coverings.
- Provide metal terrazzo or butt jointing between all floor material changes.
- Provide waterproof membrane to base height where water is present, (i.e., restrooms) for upper levels tenants and all food tenants.

Ceilings:

- Furnish and install a ceiling through entire space.
- Ceiling heights in tenants space shall be a minimum of 9"-0".
- All sprinkler heads must be semi recessed or recessed throughout the sales area.



Store Interior Design



Lighting:

- Tenant shall provide lighting for the entire leased premises.
- · Neon will require PK housing through all penetrations.
- All store cases shall be adequately illuminated and vented.
- Display window illuminated during center hours, controlled by a time clock.
- All store lighting shall be glare free.

Note: All tenants must comply with ASHRAE/ IES 90.1-1989 refer to page 60 for lighting requirements.

Walls:

- Tenants shall provide the required rated gypsum wallboard for their side of the demising wall.
- All interior wall surfaces accessible or visible to the public must be finished in an appropriate manner using quality materials and finishes.
- All music, video, and pet shops require a minimum 2" sound insulation (refer to page 38).

Acceptable Store Interior Elements:

- Hardwoods.
- Ceramic tile.
- Natural stones.
- Metals.
- Laminates, Corian, etc.
- Carpet.
- Gypsum wall board.
- Concealed spline.
- 2'-0" x 2'-0" acoustical ceiling tile system.
- Slatwall.
- Painted gypsum.
- 2'-0" x 2'-0" fluorescent fixtures with parabolic lenses.
- Neon, provide PK housing through all penetrations.
- H.I.D. lighting with Landlord approval, (must provide glare shields).
- Track lighting, fixture can head, not to exceed 5" in length.

Unacceptable Store Interior Elements:

- Vinyl flooring and base not allowed in sales area.
- Vinyl stripping between material floor changes.
- Unfinished concrete in sales area.
- · Indoor/ outdoor carpeting.
- Unfinished metals.
- 2'-0"x4'-0" fluorescent fixtures.
- Acrylic lenses.
- Exposed lighting in sales area.
- Strobe, spinner, chase, or moving type of lighting.
- 2'-0"x4'-0" acoustical ceiling system in sales area.
- Mirrored ceiling.



Interior Lighting Design



STOREFRONT SIGNAGE DESIGN CRITERIA

Signage is a major visual element to be provided by the tenant. Imaginative, progressive and creative signage is essential to the success of the tenants store. All signage is subject to Landlord approval. Landlord reserves the right to disapprove any signage that does not comply with Landlord's criteria.

Signage Requirements:

- Not to exceed 70% of the width of the storefront.
- Letters shall not exceed 16" in height and 5" in depth.
- Limited to tenant trade name (d.b.a.) only as defined in the lease.
- Registered trademarks and manufactures labels are not allowed.
- Signage shall be placed on tenant's storefront at a minimum of 8'-0" A.F.F.
- Silk-screen signature area maybe applied to the interior surface at 3'-0" A.F.F. Verbiage shall be limited to tenant's name or logo with a maximum letter height of 3".
- All illuminated signs must be fabricated and installed according to national, local building and electrical codes and must bear UL label.
- All electrical penetrations through the storefront fascia for sign installation shall use PK housing.
- Provide access to transformer and local disconnect.
- Clock timer controlled and illuminated during center hours.
- Interior signs that are visible from outside the tenant's space must be approved by Landlord.
- All signage must be installed as per code.
- Lower level tenant's signage must be closed off at top to eliminate viewing interior of sign from above.

Unacceptable Sign Types:

- · Vacuum formed luminous letters.
- Paper, cardboard, foamcore, cloth and decais.
- Exposed neon.

- Animated and flashing lights.
- Projecting box or cabinet type signage.
- Signs painted directly on tenant's storefront sign.

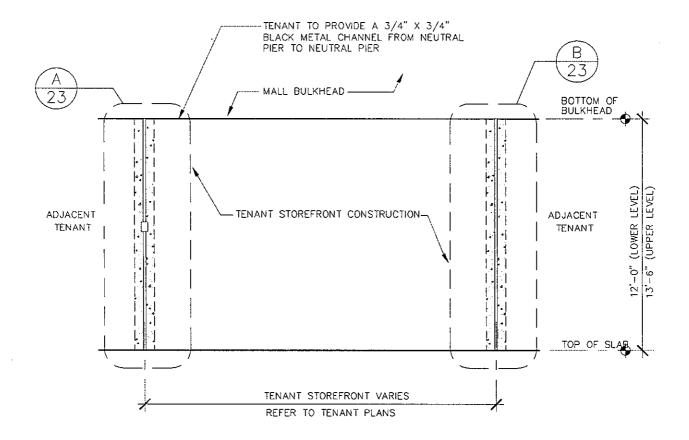
STOREFRONT BLADE SIGN DESIGN CRITERIA

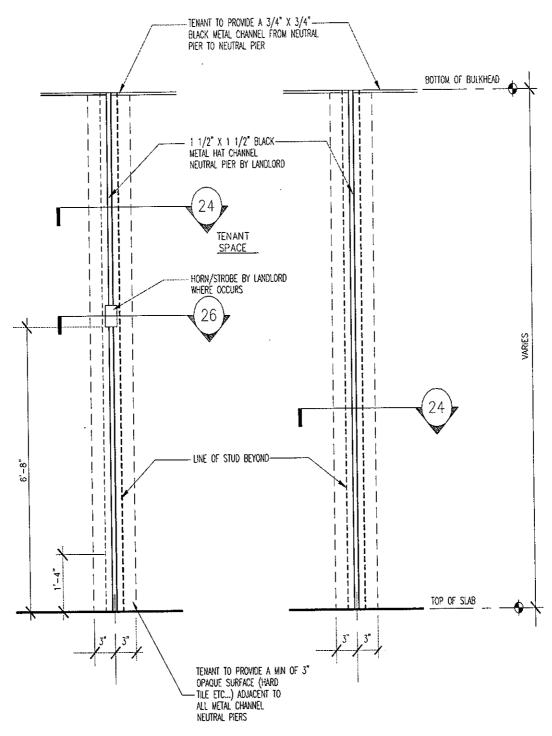
Tenants in Lower Level and Upper Level may be required to have a non-illuminated blade sign @ Landlord's discretion. Landlord encourages all tenants to design a unique three dimensional blade sign. Blade sign is to be designed as an integral component of the storefront. All signage is subject to Landlord approval.

Blade Signage Requirements:

- Tenants shall design, furnish and install the blade sign.
- Tenant's name, logo and/ or graphic image.
- Image must be on both sides and right reading on opaque material.
- Must be of a hard durable opaque material.
- Maximum signage area-shall be 6 square feet.
- Minimum signage area shall be 4 square feet.
- Material thickness shall be minimum of 1".
- The lowest point of the sign shall not be less than 8'-0" A.F.F.
- Bracket shall extend 4'-0" from storefront.
- All brackets must be structurally designed and mounted to tenant's storefront by tenant.



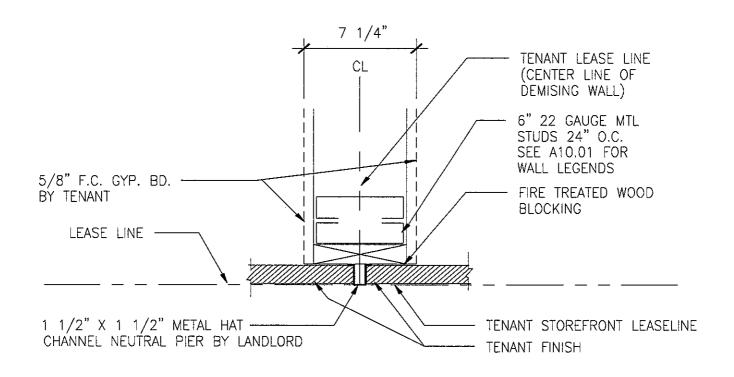




'A' ELEVATION

B' ELEVATION

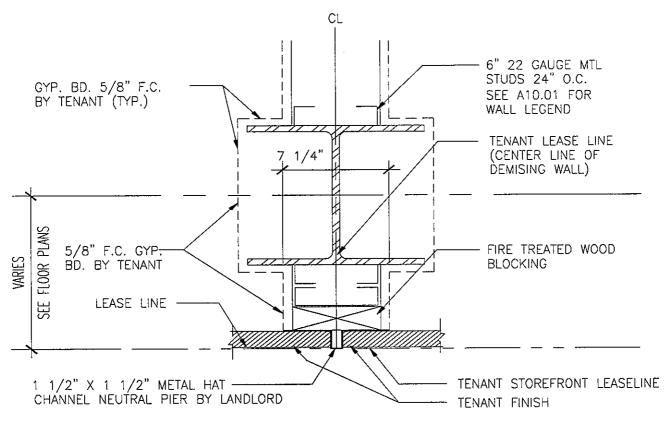






CENTER COMMON AREA

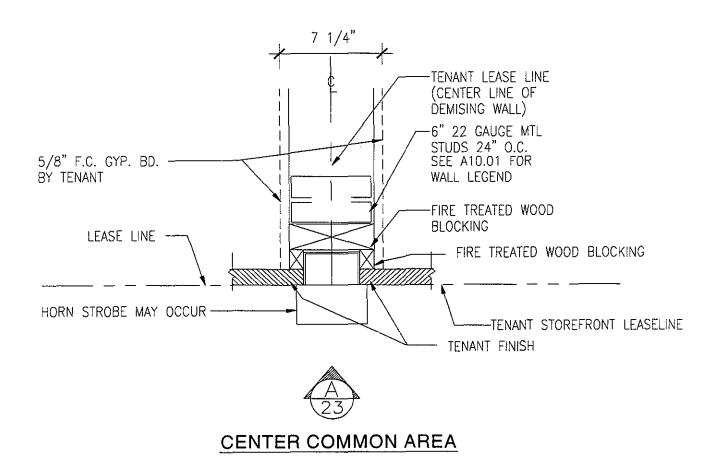






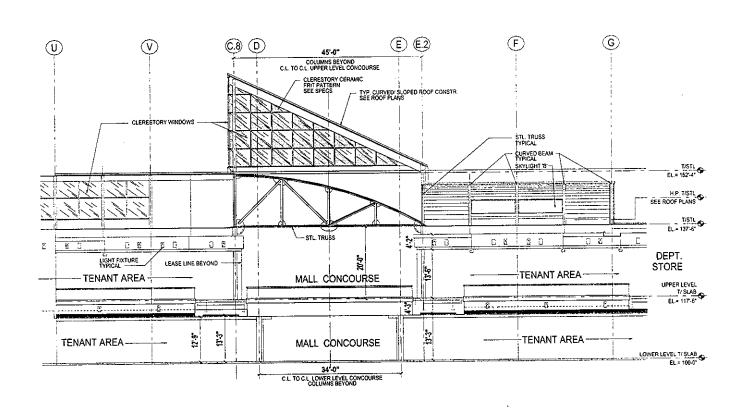
CENTER COMMON AREA





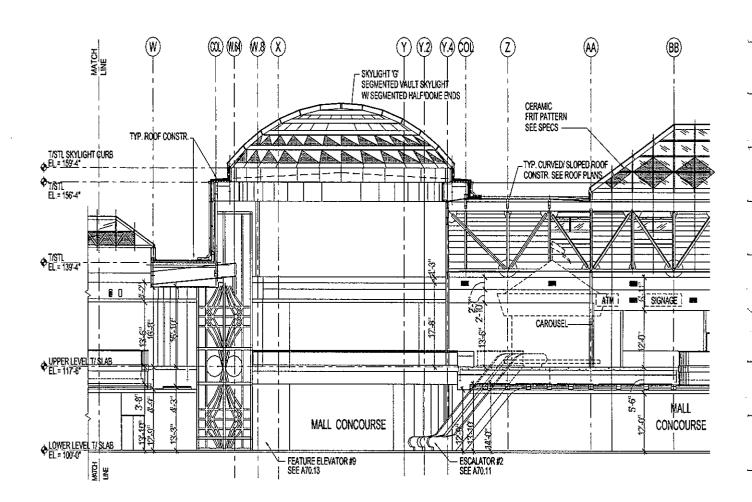
RiverTown Crossings





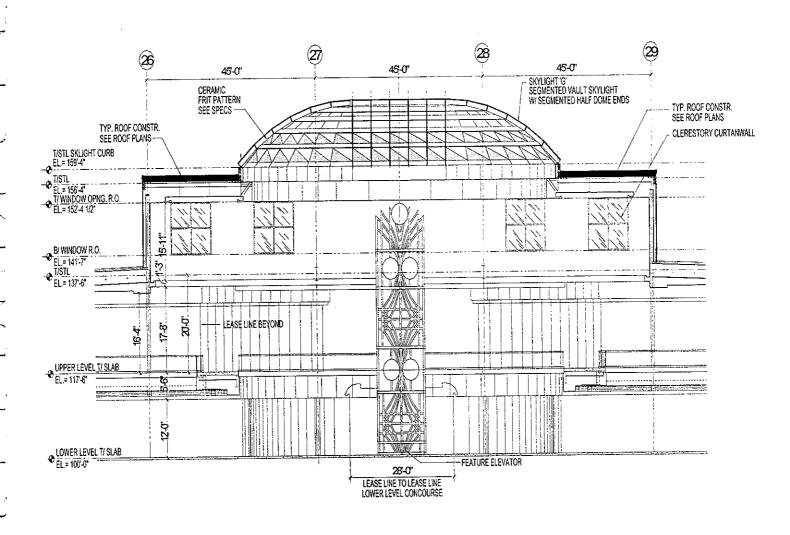
CROSS SECTION THROUGH MALL FACING EAST

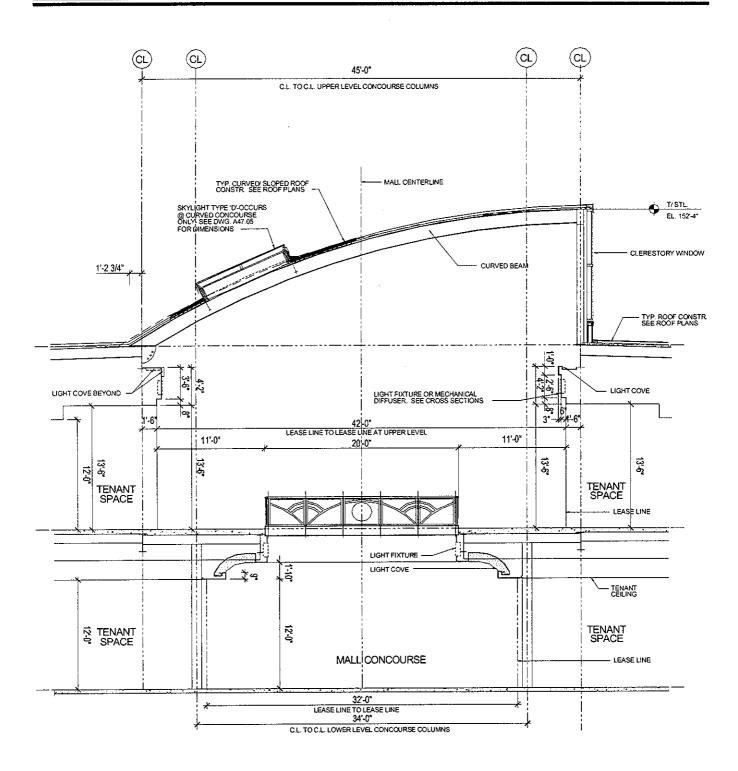




SECTION THROUGH FOOD COURT & SPECIALTY TENANTS

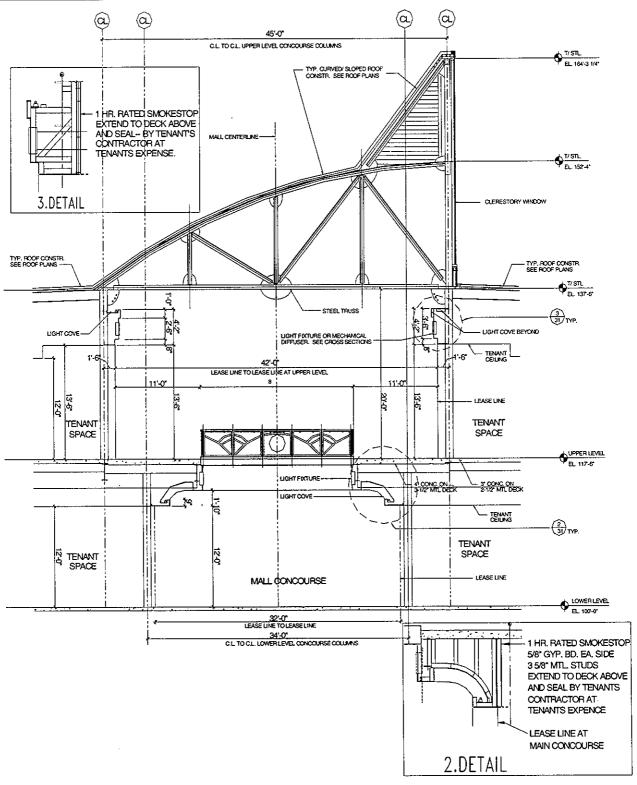






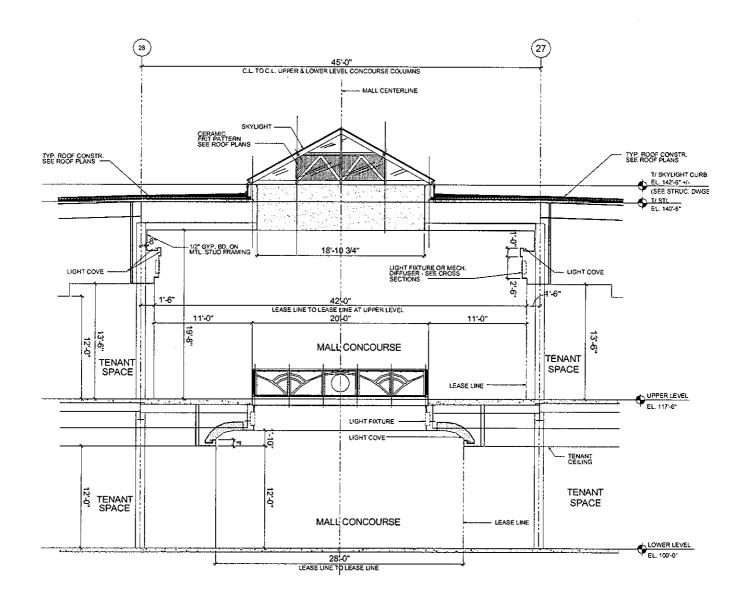
TYPICAL MALL SECTION THOUGH CONCOURSE





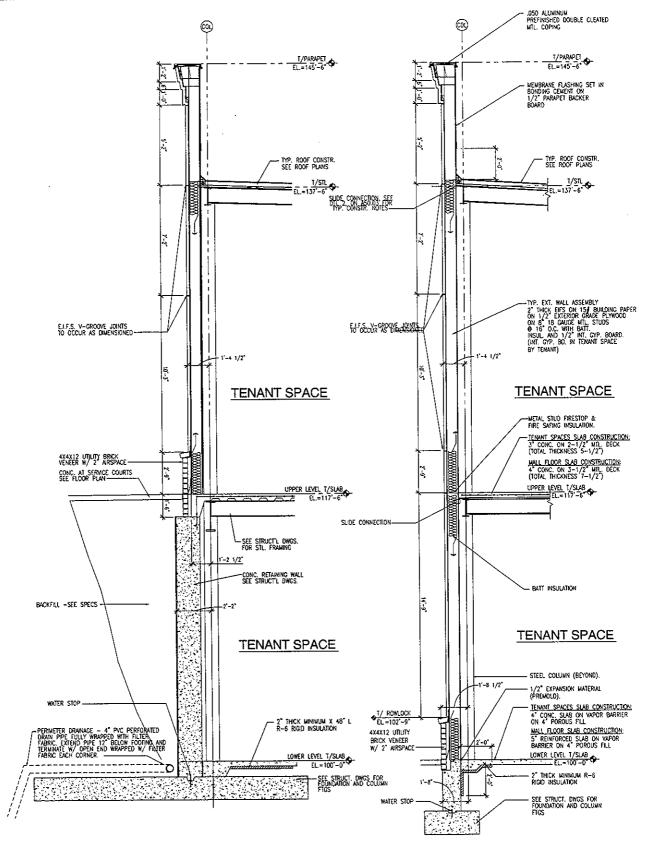
1. TYPICAL MALL SECTION THROUGH MAIN CONCOURSE TYPICAL TRUSS





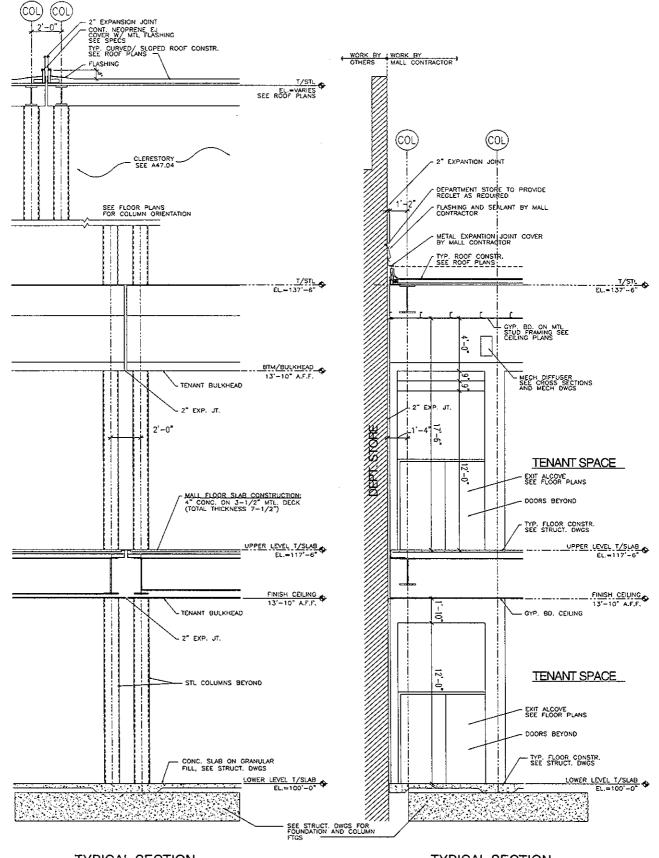
TYPICAL MALL SECTION THOUGHOUT MAIN CONCOURSE
AT SPECIALTY TENANTS





TYPICAL EXTERIOR 2-STORY WALL

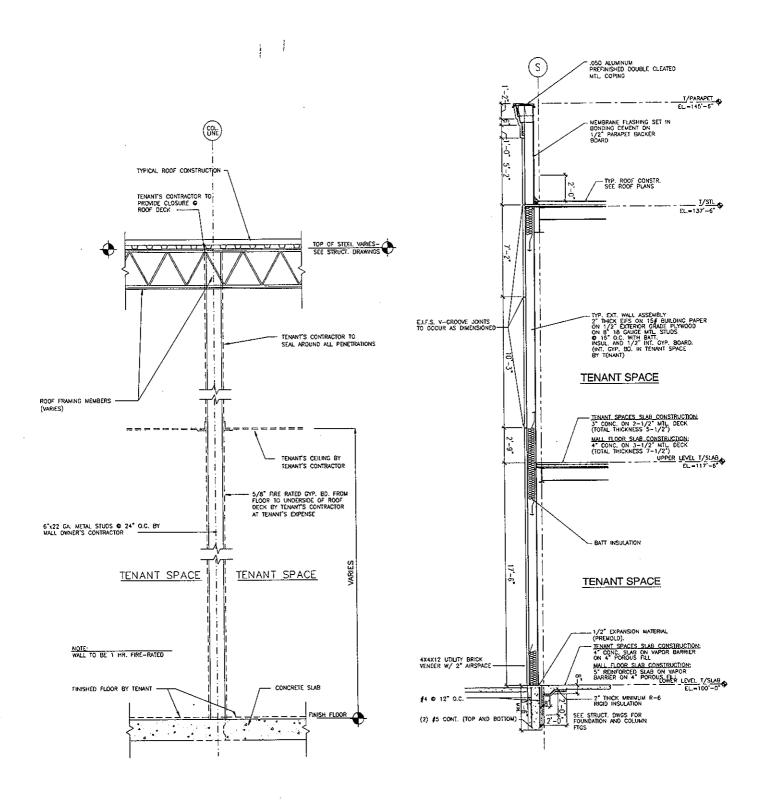




TYPICAL SECTION
THROUGH EXPANSION JOINT

TYPICAL SECTION
THROUGH DEPARTMENT STORE



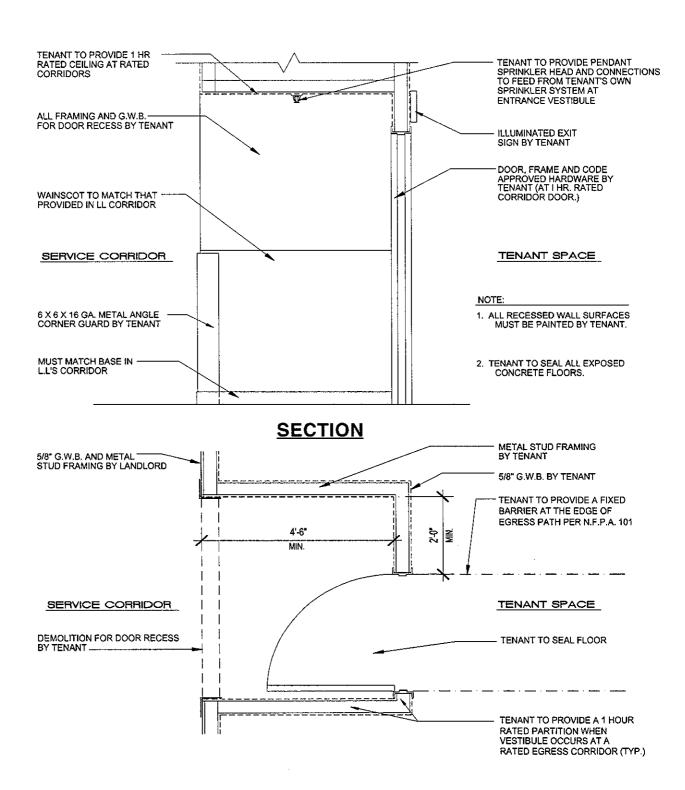


TYPICAL SECTION AT TENANT'S DEMISING PARTITION

TYPICAL WALL SECTION

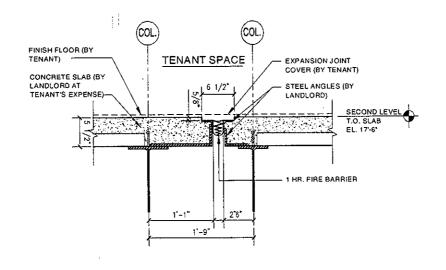
@ MAJOR RETAIL

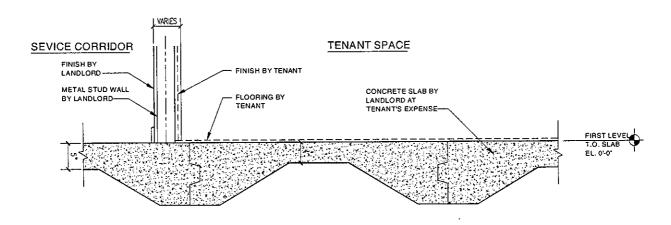


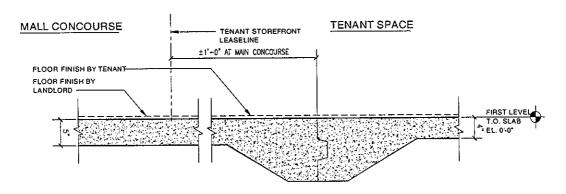


PLAN



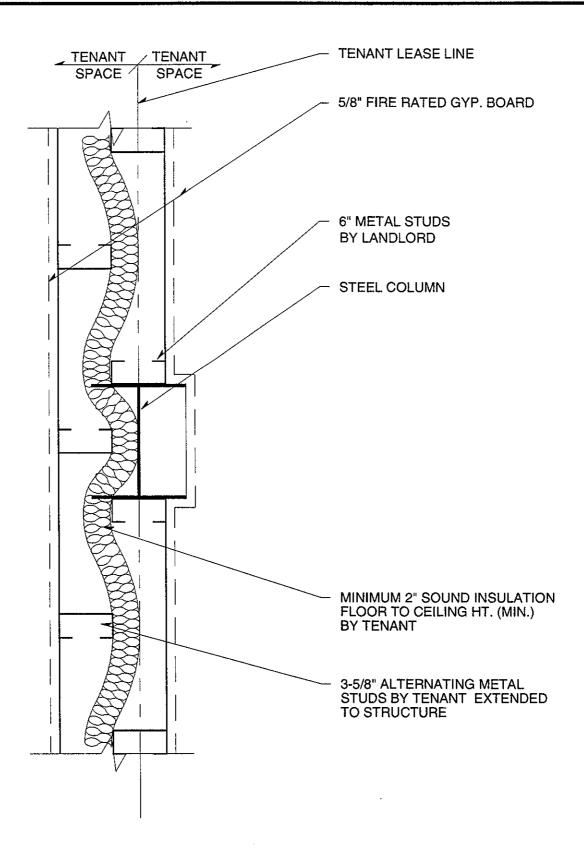


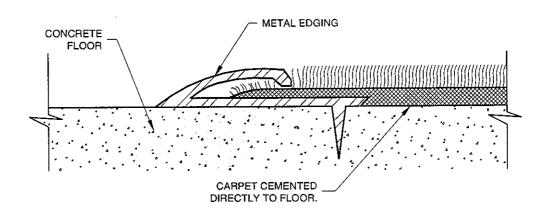


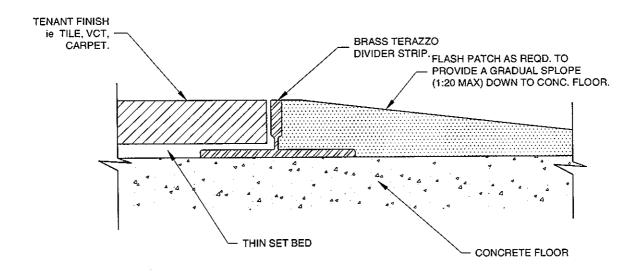


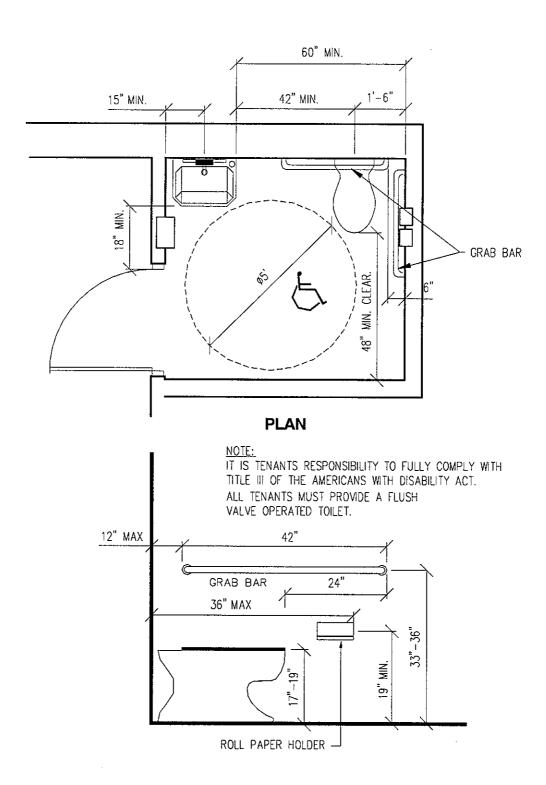
FLOOR CONSTRUCTION JOINT AT MALL CONCOURSE





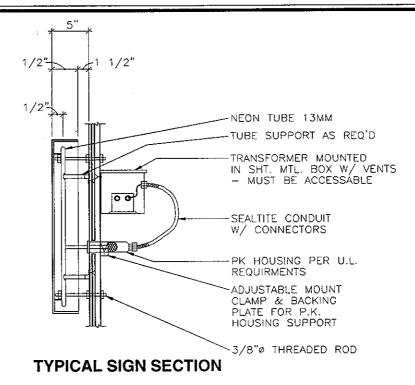


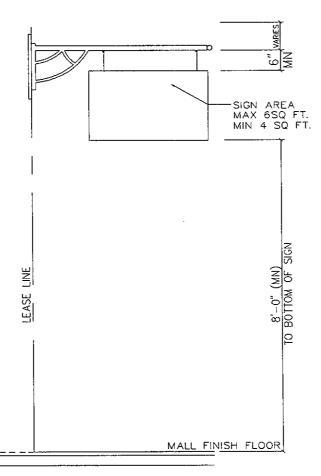




ELEVATION







TYPICAL BLADE SIGN



FOOD COURT DESIGN CRITERIA

The food court featuring specialty food tenants is located on the second level. Tenants surround the common eating area where tables and seating for approximately 900 people is provided. Skylights above allow natural light to create an open attractive atmosphere. Tenants are encouraged to develop a unique and innovated design and not a traditional franchise look. It is Landlord's intent that food court tenants convey an open market atmosphere and therefore it is important that tenants design shall be compatible with neighboring tenants.

Note: All food court tenants must comply with all health regulations and applicable ordinances of local governing authorities.

CONTROL ZONE CRITERIA

The front 10'-0" area from the food court lease line has been designated as a control zone area. All food court tenants must comply with this criteria.

Countertop:

- The front counter shall have a 2" radius bullnose and be constructed of solid core surfacing material.
- Recesses in the top counter surfaces, (for cash registers, food trays, drink dispensers etc.) must be set back a minimum of 8" from the front edge of the counter.
- Beverage machines and all other miscellaneous equipment on the front counter are subject to design review. Equipment must be screened and recessed into the countertop, not to exceed 4'-0" in height.
- Sneeze guards, shall be architecturally compatible with counter design and in accordance with code.
- Provide concealed lighting, in counter designs where appropriate.

Countertop Materials:

- Brushed stainless steel.
- Natural stone (i.e., marble, granite, slate).
- Glazed ceramic tile.
- Solid surface (i.e., Corian, Avonite).
- Wood with clear finish.
- · Laminate countertops are not acceptable.

Ceiling:

- Tenant shall provide a nonporous washable ceiling.
- Painted gypsum wall board, shall be used in the control zone area.
- Ceiling height in the control zone area must be a minimum of 11'-6".
- Drop in panel ceilings is not acceptable in the control zone area.



Lighting:

- Provide accent lighting at the countertop using recessed incandescent or pendant type fixtures.
- Provide recessed incandescent fixtures and flush/ recessed sprinkler heads within the control zone.
- 2'-0" x 4'-0" fluorescent lighting is acceptable in the control zone area only with Landlord's approval. Note: All tenants must comply with ASHRAE/ IES 90.1-1989 for lighting requirements.

Flooring:

 Provide a ceramic or quarry tile floor with waterproof membrane underlayment and base within the control zone area.

Walls:

- All wall materials shall be washable and nonporous (i.e., epoxy paint, ceramic tile, stainless steel).
- Provide a food preparation screen wall with service door separating the service and food preparation areas.
- The preparation screen wall must be located 10'-0" from tenant's lease line.
- Service door shall be self-closing to shield the back room from public view.
- · Mirrored walls are not acceptable within control zone area.

Menu Board:

- Menu boards shall be integrated into the overall storefront design. Menu boards shall be recessed or surface mounted onto the preparation screen wall.
- Menu Board must be illuminated either internally or externally whichever is best in keeping with the
 design theme of the store, at Landlord's sole discretion.

STORE INTERIOR DESIGN CRITERIA

The use of quality materials for flooring, walls, ceiling and lighting in accordance with design criteria drawings, is required and are subject to Landlord's approval. Food court tenants must obtain food court drawings package from Landlord.

Ceiling:

- Tenant shall provide a nonporous gypsum board washable ceiling.
- Acoustic tile.

Lighting:

Fluorescent type lighting is acceptable.

Floors:

- All materials shall be of a washable nonporous surface.
- Ceramic or quarry tile floor and base in food preparation area.
- Provide a waterproof protective membrane turned up to base height throughout entire space.



STORE INTERIOR DESIGN CRITERIA (continued)

Walls:

All wall materials shall be washable nonporous (i.e., epoxy paint, ceramic tile, stainless steel).

SIGNAGE DESIGN CRITERIA

Signage is a major visual element to be designed and provided by the tenant using the Landlord's designated sign contractor. Particular attention should be given to signage and graphics as they are an important part of the overall design theme. All signage is subject to Landlord approval. Landlord reserves the right to disapprove any signage that does not comply with Landlord's criteria.

Landlord will design and provide the structure and background to which the storefront signage can be attached. This background and structure will consist of an aluminum signboard with metallic brass finish. Landlord will provide an empty conduit from sign band armature through Landlord's bulkhead. Tenant shall utilize this conduit for all associated signage wiring and remote placement of transformer.

Signage Requirements:

- One sign centered top to bottom on allotted Landlord's panel.
- Limited to the tenant's trade name as defined in the lease.
- Maximum letter height shall not exceed 16".
- Maximum length can not exceed 16'-0".
- Provide PK housing.
- Provide clear plastic standoff posts.
- All signage must be installed as per code.
- Clock timer controlled and illuminated during center hours.

Acceptable Sign Types:

- · Exposed double stroke neon.
- Graphic signage is encouraged and shall be located at the food preparation screen wall.

Unacceptable sign types:

- Animated.
- Can signs.
- Box signs.

Note: Exposed raceways, ballast boxes, electrical transformer and/ or sign company names are not permitted.

Landlord's Designated Sign Contractor:

Paul Anthony Design, Inc. 4401 Waldon Lancaster, New York 14086 Phone: 716-683-1623 Mr. Paul Inglese



The following is a list of minimum design information required to expedite plan approval by Landlord. It is not intended to be a complete listing of all requirements, but should serve as a minimum check list to be used by tenant's design consultants to complete the construction documents.

We urge you to read this manual in its entirety in order to fully understand the requirements needed to generate an approvable set of construction documents.

HVAC DRAWING REQUIREMENTS

- Retail Air Systems
- Identification of RTU manufacture, size and location.
- Mechanical symbol and equipment list.
- · Duct sizes Heights above finished floor.
- Diffuser and grille schedule.
- Damper locations.
- Type of insulation.
- Typical hanger detail from top chords of structure only.
- · Thermostat locations.
- Control wiring diagram.
- Toilet exhaust detail.
- Notes and specifications.
- Heat gain & heat loss calculation sheet, incorporate in plans.

Additional Food Related Tenant Requirements:

- Roof top equipment locations, curb details and structural support details.
- Make-up air unit details and specifications.
- Specifications of exhaust equipment.
- Cooking hood details and equipment.
- Automatic fire extinguishing equipment.
- Control/ fire alarm wiring interface diagram.

The landlord has pre-approved Retail Air Systems to provide and install the roof curb and Carrier HVAC equipment to the Tenants. The Tenant is required to contract directly with Retail Air for purchase and installation of the R.T.U.

Contact: Mr. Dave Canter
Retail Air Systems
611 W. Manning Street
Chattanooga, TN 37405
1-800-245-8104
Fax 423-266-7519



DESIGN PARAMETERS

HVAC Specifications:

Outdoor Temperature

88 FDB / 75 FWB- Summer (ASHRAE 2 1/2 %)

2 FDB / Winter (ASHRAE 1/2 %)

Indoor Temperature

76 FDB Summer 70 FDB Winter

Outside Air

0.2 CFM / sq.ft. (by Landlord) for lower level tenants

U-Factor

Roof - 0.05

Exterior Wall - 0.08

(refer to tenant plan for quantity and location).

Flex duct must not exceed 5'-0".

Note: Tenants must comply with ASHRAE/ IES 90.1-1989.

Universal Rooftop Air Conditioning - Mounting Curbs and Universal Curbs:

Landlord has installed UNIVERSAL ROOF CURBS for mounting rooftop air conditioners and utility curbs for toilet exhaust and plumbing vents. Universal curbs will enable Tenant to install the air conditioning unit in a level structurally sound position without having to cut into the roof. Per the lease, Tenant will be charged for these curbs.

LOWER LEVEL TENANTS

THE FOLLOWING ITEMS ARE INCLUDED IN RETAIL AIR SYSTEMS' PACKAGE:

Refrigerant Sleeve Package which includes:

Refrigerant Sleeve with Pipe Curb and Housing Installed

Carrier HVAC Split System(s) which includes:

- Condensing Unit, Pad and Platform Curb Installed to Roof
- Labor and Materials to Install Air Handler in Tenant Space
- Labor and Materials to Install Refrigerant Lines
- Digital Non-Programmable Carrier Thermostat (Model: TSTATCCN2S01)
- · Check-Out, Start UP and Line Test System
- One (1) Year Labor and Parts Warranty
- Five (5) Year Compressor Part Warranty
- One Year Routine Maintenance (Includes Six Filter Changes)



NOTE: All Condensing Units are 460v / 3ph / 60. The 3-5 ton Air Handlers have 208 / 230 volt, single phase motors with 460v / 3ph heaters with single point connection. If heat is not included on these 3-5 ton Air Handlers, tenant must pull 208 / 230 / 460 volt, 3 phase multi-tap motors.

THE FOLLOWING ITEMS ARE NOT INCLUDED IN RETAIL AIR SYSTEMS' PACKAGE:

- Line Voltage and Disconnects on Air Handler and Condensing Unit (Supplied and Installed by others)
- Control Wiring on Air Handler and Condensing Unit (Supplied and Installed by others)
- · Programmable, Night Setback, Lightstat, etc., Thermostats
- Ductwork, Air Distribution and Air Balance
- · Smoke Control System and Detectors
- Condensate Drainline from Air Handler

UPPER LEVEL TENANTS

THE FOLLOWING ITEMS ARE INCLUDED IN RETAIL AIR SYSTEMS' PACKAGE:

Curbing Package which includes:

- Base Curb with Temporary Top Installed To Roof
- Restroom Exhaust Curb With Cap And Relief Vent Installed To Roof

HVAC Unit(s)-Carrier 48HJE Gas Unit with:

- Adapter Frame Required To Adapt HVAC Unit To Base Curb
- · Labor and Equipment Required to Install HVAC Unit To Base Curb
- Economizer With Enthalpy Control
- Condensate P-trap with Splashblock
- Digital Non-Programmable Carrier Thermostat (Model: TSTATCCN2S01)
- Check-Out And Start Up Of Unit
- One (1) Year Labor And Parts Warranty
- Five (5) Year Compressor Part Warranty
- Ten (10) Year Heat Exchanger Warranty
- First Year Routine Maintenance (Includes Six Filter Changes)

THE FOLLOWING ITEMS ARE NOT INCLUDED IN RETAIL AIR SYSTEMS' PACKAGE:

- Line Voltage and Disconnect (Supplied and Installed by others)
- Control Wiring (Supplied and Installed by others)
- Programmable, Night Setback, Lightstat, etc., Thermostats
- Ductwork, Air Distribution and Air Balance
- Smoke Control System and Detectors
- Gas Piping and Regulator to HVAC Unit



REFRIGERANT SLEEVE, PIPE CURB AND HOUSING

Pipe curbs with housings for the lower level tenant's refrigerant lines shall be installed during base building construction by Retail Air Systems at tenant expense. Retail Air Systems shall bill the tenant for such work along with the billing for the other work performed for tenant.

LOWER LEVEL TENANT SPLIT SYSTEM OPTIONS

A. 3 TON SPLIT SYSTEM

Carrier 38CKC-036 condensing unit with FB4A-036 air handler, 8KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).

B. 4 TON SPLIT SYSTEM

Carrier 38CKC-048 condensing unit with FB4A-048 air handler, 8KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).

C. 5 TON SPLIT SYSTEM

Carrier 38CKC-060 condensing unit with FB4A-060 air handler, 10KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).

D. 6 TON SPLIT SYSTEM

Carrier 38CKC-007 condensing unit with 40RM-007 air handler, 15KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).

E. 7 1/2 TON SPLIT SYSTEM

Carrier 38CKC-008 condensing unit with 40RM-008 air handler, 15KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).



F. 8 1/2 TON SPLIT SYSTEM

Carrier 38AKS-009 condensing unit with 40RM-009 air handler, 15KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).

G. 10 TON SPLIT SYSTEM

Carrier 38AKS-012 condensing unit with 40RM-012 air handler, 15KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).

H. 12 1/2 TON SPLIT SYSTEM

Carrier 38AKS-014 condensing unit with 40RM-014 air handler, 20KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).

I. 15 TON SPLIT SYSTEM

Carrier 38AKS-016 condensing unit with 40RM-016 air handler, 30KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).

NOTE:

Each of the above systems have condensing units with 460v / 3ph / 60 electrical. The 3-5 ton air handlers have 208 / 230 volt, single phase motors with 460v / 3ph heaters with single point connection.

If heat is not included on these 3-5 ton air handlers, tenant must pull 208 / 230 volt, single phase power service to the air handler.

The 6-15 ton air handlers have 208 / 230 / 460 volt, 3 phase multi-tap motors.



F. 8 1/2 TON SPLIT SYSTEM

Carrier 38AKS-009 condensing unit with 40RM-009 air handler, 15KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).

G. 10 TON SPLIT SYSTEM

Carrier 38AKS-012 condensing unit with 40RM-012 air handler, 15KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).

H. 12 1/2 TON SPLIT SYSTEM

Carrier 38AKS-014 condensing unit with 40RM-014 air handler, 20KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).

I. 15 TON SPLIT SYSTEM

Carrier 38AKS-016 condensing unit with 40RM-016 air handler, 30KW electric heat with single point connection, digital-non programmable thermostat, 5 year compressor warranty, condensing unit pad and platform curb, labor and materials to unload and install these items, check-out, start-up, line test, first year warranty and first year maintenance. (Includes six filter changes to air handler).

NOTE:

Each of the above systems have condensing units with 460v / 3ph / 60 electrical. The 3-5 ton air handlers have 208 / 230 volt, single phase motors with 460v / 3ph heaters with single point connection.

If heat is not included on these 3-5 ton air handlers, tenant must pull 208 / 230 volt, single phase power service to the air handler.

The 6-15 ton air handlers have 208 / 230 / 460 volt, 3 phase multi-tap motors.



F. 8.5 TON UNIT

Carrier 48HJE009 with 460/3/60, Enthalpy Controlled, Economizer, Digital-Non Programmable Thermostat, 5 Year Compressor Parts Warranty, Adapter Frame required to adapt unit to base curb, Labor and Crane to unload and set unit on roof, Check-out, Start-up, First Year Warranty and First Year Maintenance. (Includes six filter changes).

G. 10 TON UNIT

Carrier 48HJE012 with 460/3/60, Enthalpy Controlled, Economizer, Digital-Non Programmable Thermostat, 5 Year Compressor Parts Warranty, Adapter Frame required to adapt unit to base curb, Labor and Crane to unload and set unit on roof, Check-out, Start-up, First Year Warranty and First Year Maintenance. (Includes six filter changes).

H. 12.5 TON UNIT

Carrier 48HJE014 with 460/3/60, Enthalpy Controlled, Economizer, Manual Thermostat, 5 Year Compressor Parts Warranty, Adapter Frame required to adapt unit to base curb, Labor and Crane to unload and set unit on roof, Check-out, Start-up, First Year Warranty and First Year Maintenance. (Includes six filter changes).

I. 15 TON UNIT

Carrier 48HJE018 with 460/3/60, Enthalpy Controlled, Economizer, Digital-Non Programmable Thermostat, 5 Year Compressor Parts Warranty, Adapter Frame required to adapt unit to base curb, Labor and Crane to unload and set unit on roof, Check-out, Start-up, First Year Warranty and First Year Maintenance. (Includes six filter changes).

J. 20 TON UNIT

Carrier 48HJE025 with 460/3/60, Enthalpy Controlled, Economizer, Digital-Non Programmable Thermostat, 5 Year Compressor Parts Warranty, Adapter Frame required to adapt unit to base curb, Labor and Crane to unload and set unit on roof, Check-out, Start-up, First Year Warranty and First Year Maintenance. (Includes six filter changes).

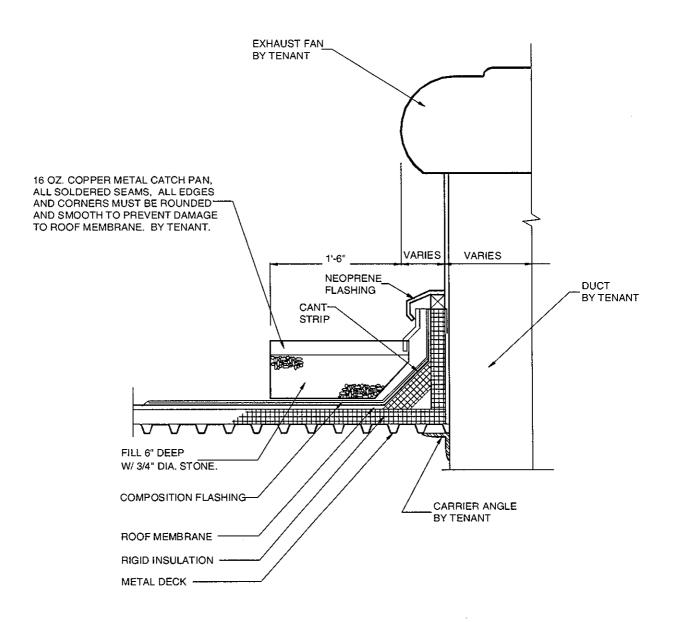


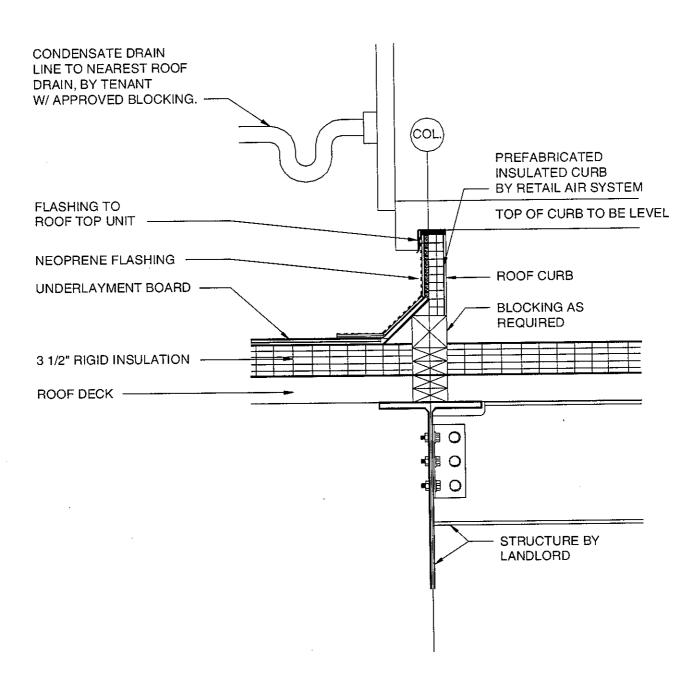
GENERAL REQUIREMENTS:

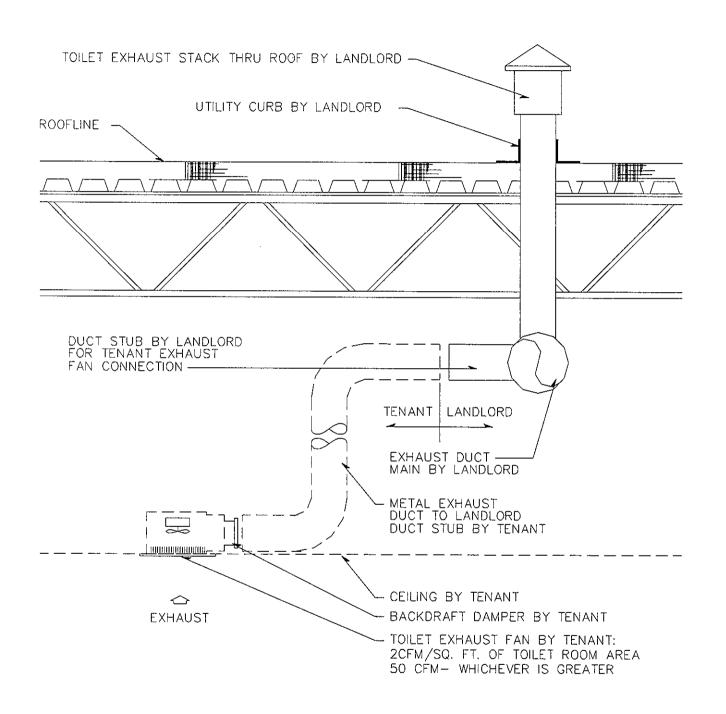
- All air conditioners must be fitted with automatic economizer systems. Relief air shall be provided through the Tenant rooftop unit.
- Tenants must use the area above the ceiling for a return air plenum.
- No insulation may be used on top of suspended ceiling.
- Spaces with an air conditioning load of three tons or larger must use a rooftop unit. Voltage to be 460V., 3 phase.
- Special attention should be given to the ventilation requirements of food, beauty salons, photo processing stores, pet stores, etc. where odors need to be isolated or vented. These stores <u>cannot</u> use economizer control systems on their air conditioning units. The HVAC units are to be balanced whereby the introduction of outside air a fixed amount (90%) of the exhaust air. Tenants using large quantities of exhaust air shall provide separate makeup air units as required to produce the needed quantity of outside air.
- The design must meet all applicable codes, rules and safety procedures. The system design must incorporate a distribution system to all areas of the Tenant's store.
- A mall EMS Junction Box will be provided for each tenant bay to control the tenant's RTU fan, heating and cooling. The Landlord's EMS contractor will make all final connections at the tenant's expense.



HEAT GAIN CALCULATIONS - RIVERTOWN CROSSING MALL						
TENANT NAME:	FENANT NAME: SPACE NO:					
DESIGN CONDITIONS	:					
TENANT AREA =	4500	LATITUDE	43			
DESIGN MONTH:	JULY	DESIGN TIME:	3 PM			
		DB	WB	GR/LB		
SUMMER-	INSIDE	76	62.4	104		
-	OUTSIDE	88	74	63		
	DIFF.	12		- 41		
TRANSMISSION GAIL	V					
ITEM	AREA X	U FACTOR X	TEMP. DIFF.=	BTU/HR		
WALL						
WALL					<u> </u>	
ROOF						
FLOOR						
CEILING						
PARTITION						
SUBTOTAL						
INTERIOR SENSIBLE	GAINS					
SOURCE	QUANTITY		HEAT GAIN		CONVERSION	BTU/HR
LIGHTS		SF X_		WATTS/SF	X 3.414	
POWER		SF X		WATTS/SF	X 3.414	
PEOPLE		X		BTU/HR		
MISC. GAINS		SF X		WATTS/SF	X 3.414	
SUBTOTAL						
SAFETY FACTOR	<u> </u>					
SPACE SENSIBLE HE		· · · · · · · · · · · · · · · · · · ·		<u> </u>		
INTERIOR LATENT G						
SOURCE	QUANTITY		HEAT GAIN		CONVERSION	BTU/HR
PEOPLE		X		BTU/HR	<u> </u>	
MISC. GAINS		SF X		WATTS/SF	X 3.414	
SUBTOTAL					<u> </u>	
SAFETY FACTOR	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>
SPACE LATENT HEAT						
TOTAL LOADS						
SENSIBLE HEAT + LATENT						
TOTAL	IUIAL					

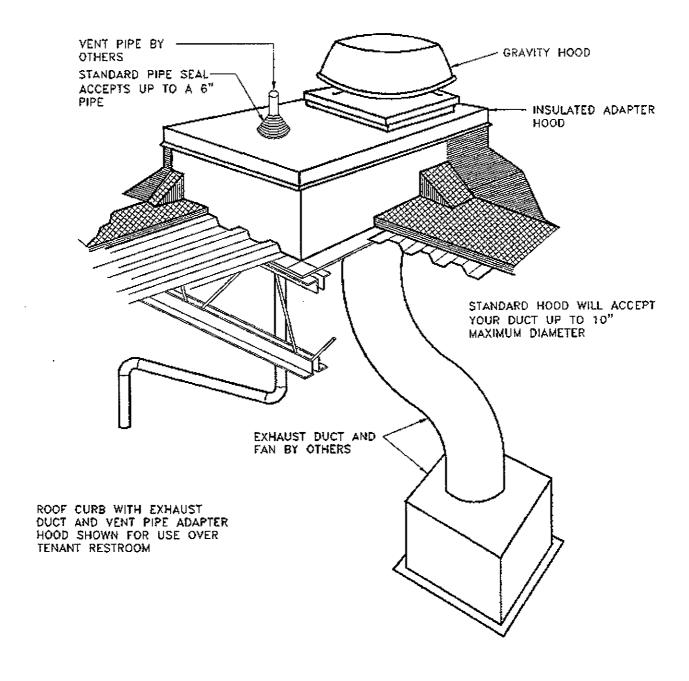




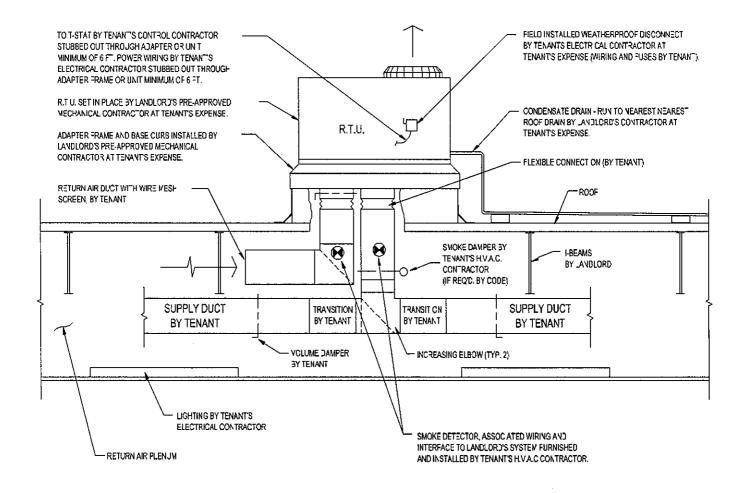


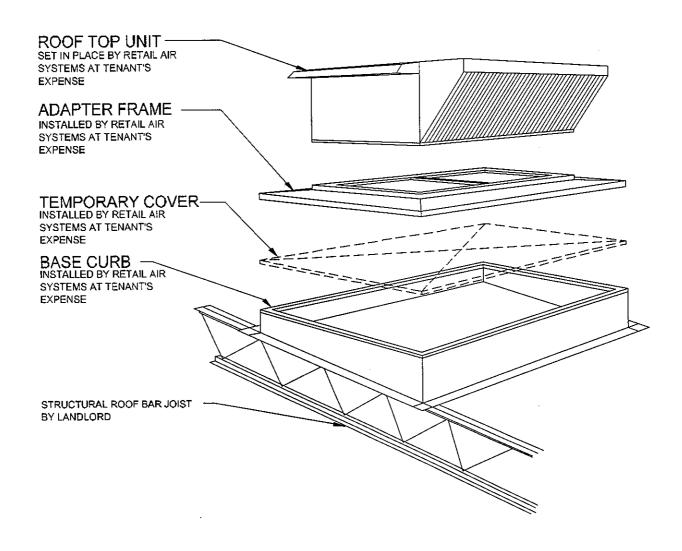
NOTE: ALL RESTAURANT TENANTS SHALL PROVIDE THEIR OWN THROUGH THE ROOF TOILET EXHAUST.

UTILITY CURB SYSTEM











The following is a list of minimum design information required to expedite plan approval by Landlord. It is not intended to be a complete listing of all requirements, but should serve as a minimum check list to be used by tenant's design consultants to complete the construction documents.

We urge you to read this manual in its entirety in order to fully understand the requirements needed to generate an approvable set of construction documents.

ELECTRICAL DRAWING REQUIREMENTS

- Floor and wall receptacles location and type
- Fans, motors and all electrical equipment-location and type
- Floor and wall voice/data outlets-location and type
- POS outlets (voice/data outlets and isolated ground receptacles)-location and type
- Lighting fixture layout (including lamp type and voltage)
- Lighting fixture schedule
- Emergency, exit and night lighting fixture layout (all with battery backup)
- Branch circuit conduit, wire size and layout
- Feeder wire sizing
- Electrical room layout (i.e., transformer, panel(s), time clock, etc.);
 plan must be to 1/4"=1'-0" scale
- Conduit and wire sizing for HVAC equipment and panel (where applicable); indicate overcurrent protective device type and size for equipment and panel
- Complete electrical panel schedule(s) and MEP tabulation sheet (refer to page 71)
- · Notes and specifications on drawings
- Fire alarm system tie-in: location, type and manufacturer of devices; manufacturer to adhere to mall standards.

LANDLORD SUPPLIED ELECTRICAL AND VOICE/DATA SERVICES (ALL TENANTS)

Electrical Service:

The landlord has designed and installed a master metered electrical distribution system originating from the electrical service rooms located throughout RiverTown Crossings. An empty electrical service conduit with pullstrings from the landlord's electrical service room is terminated at each space. Additionally, the landlord shall provide all associated tenant fuses in the landlord's power distribution panels located in the main electrical service rooms (refer to page 63).

DESIGN PARAMETERS:

- Electrical service
- Typical tenant service size
- Food court tenant service size
- Restaurant tenant service size
- Large tenant service size (in excess of 13,000 sq. ft.)

480Y/227V-3Φ4W 60 Hz 200A - 10 watts/square foot with 2" empty conduit and pullstring 200A - 60 watts/square foot with 2" empty conduit and pullstring 200A - 60 watts/square foot with (2) 4" empty conduit and pullstring 200A - 10 watts/square foot with (2) 4" empty conduits and pullstring



- · Typical kiosk tenant service size
- Typical RMU tenant service size

40 watts/square foot with (2) 20A 120V circuits 40 watts/square foot with (1) 20A 120V circuit

VOICE/DATA SERVICE

The landlord has installed an empty 1" voice/data service conduit with pullstring from the landlord's electrical service room to each leased tenant space and an empty 3/4" voice/data service conduit with pullstring to each kiosk and RMU tenant.

Note: Refer to tenant plan for exact service location and conduit sizes.

TENANT RESPONSIBILITY

The tenant shall provide a complete electrical system originating from the landlord's main distribution switchgear. All conduit from the landlord's main switchgear up to an electrical service stub into the tenant space is furnished and installed by the landlord. All wire from the landlord's main switchgear to within the leased premises including, but not limited to, all necessary labor, main and branch circuit breakers, panels, transformers, conduit, wire, etc., necessary for the satisfactory operation of the electrical system is furnished and installed by the tenant. Individual tenant meters in the tenant spaces are not permitted.

- Final connection at the landlord's main switchgear of the tenant's electrical service by the landlord's electrical contractor at the tenant's expense.
- Provide and install conductors from the landlord's electrical service room to the leased premises through the designated conduit.
- Electrical equipment and material shall be new, in accordance with the National Electrical Code and local codes and shall bear the Underwriters Laboratory label.
- Time clock to control storefront signage and show window lighting.
- Electrical panel(s) to be provided with bolt-on breakers and copper bus bars; 10 KAIC minimum rating.
- Lighting circuits shall be rated for switching duty.
- All tenants must comply with ASHRAE/IES 90.1-1989.
- The landlord strongly suggests that all tenants comply with a 1.0 watt/square foot lighting load within each space.

Note: The actual connected lighting load must utilize ballasts that conform to the following specification.

GENERAL

- (a) Provide ballasts by General Electric, Advance, Universal or approved equal. Ballasts shall be ETL-CBM-and UL-listed.
- (b) Owner's temporary lights will be removed when tenant contractors starts. Tenant shall then provide its own temporary lighting and power.



- (b) Ballast shall have at least 0.9 power factor unless specified otherwise. Input voltage shall be as shown on Drawings.
- (c) Furnish manufacturer's two-year warranty, including replacement parts and labor. Date of manufacture shall be stamped on nameplate.
- (d) Ballasts shall not contain PCB.

Fluorescent Ballasts

- (a) Ballasts shall meet ANSI C82 and UL 935 requirements.
- (b) No more than two T8 lamps shall be served by one ballast.
- (c) Ballasts shall have current leakage of less than 50 milliamperes.
- (d) Furnish GLR fuse and fuse holder sized and installed by luminare manufacturer in addition to internal ballast thermal protection.
- (e) Ballast shall have sound rating A (20-25 dB) unless specified otherwise.
- (f) Indoor ballasts shall have starting temperature of at least 50°F.
- (g) Outdoor ballasts shall have starting temperature of at least 0°F for 430mA and -20°F for 800-1500 mA.

Fluorescent Dimming Ballasts

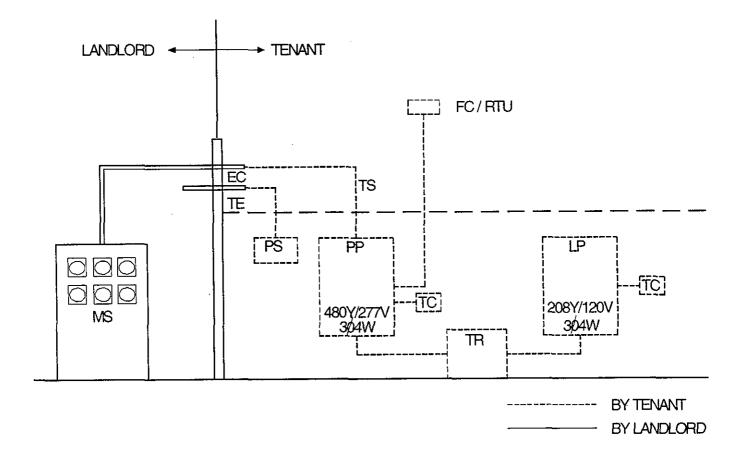
- (a) Ballast shall meet ANSI C824 and UL-1029 requirements.
- (b) Input power shall not be more than 115% of lamp power.
- (c) Maximum ballast crest factors shall be:
 - (i) 1.8 for metal halide lamps and,
 - (ii) 1.8 for high pressure sodium lamps.
- (d) Furnish KTK fuse and fuse holder, sized and installed by luminare manufacturer, in addition to internal ballast thermal protection.
- (e) Indoor ballasts shall have starting temperature of at least 0°F.
- (f) Outdoor ballasts shall have starting temperature of at least -20°F.
- (g) Indoor encased ballasts shall be capable of operating in at least 105°F ambient temperature.



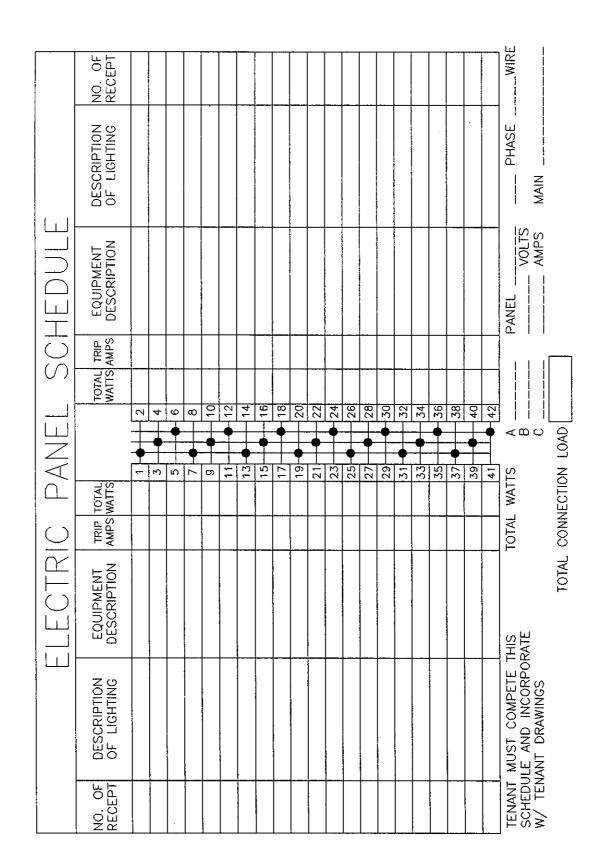
- PP 480Y/277V 3Φ4W main electrical panel by the tenant (if required). The tenant's electrical engineer shall complete a panel schedule.
- TR 480V-208Y/120V 3Φ4W transformer by the tenant.
- LP 208Y/120V 3Φ4W lighting and power panel by the tenant. The tenant's electrical engineer shall complete a panel schedule.
- TC Time clock by the tenant to control store sign and show window lighting circuits (as required).
- EC Empty conduit with pullstring provided by the landlord from the landlord's electrical service room to the leased premises. Conduit provided by the landlord, wire by the tenant. Final terminations in the electrical service room by the landlord at the tenant's expense, if applicable.
- TS Extension of the tenant's electrical service from "EC" to the tenant's main power panel. Extension of wire and conduit shall be by the tenant.

FC/

- FTU Extension of the tenant's electrical service to fan coil unit (lower level tenans) and rooftop unit (upper level tenants).
- TE Empty telephone conduit by the landlord to the leased premises. Telephone wire from the landlord's electrical service room to leased premises by the tenant and /or telephone company at the tenant's expense.
- PS Telephone system within leased premises by the tenant and local telephone company at the tenant's expense.
- MS Metered switchgear located in the landlord's local main electrical room. Provided and installed by the landlord's electrical contractor.







The following is a list of minimum design information required to expedite plan approval by Landlord. It is not intended to be a complete listing of all requirements, but should serve as a minimum check list to be used by tenant's design consultants to complete the construction documents.

We urge you to read this manual in it's entirety in order to fully understand the requirements needed to generate an approvable set of construction documents.

PLUMBING DRAWING REQUIREMENTS

- Location of fixtures
- Clean-out and floor drain locations
- Domestic water distribution
- Water heater detail with relief valve and piping to floor drain
- Location of sewer and vent connection
- MEP load tabulation sheet, incorporate in plans (refer to page 71)
- Water, waste and vent riser diagrams (refer to pages 67, 68)

Additional Food Related Tenant Requirements:

- Gas piping layout
- Line sizes
- Control valves
- Grease waste connection
- Gas meter location

LANDLORD SUPPLIED DOMESTIC WATER, SANITARY, VENT, GREASE AND GAS

Landlord has designed and installed the following utilities to each leased premises:

Note: Refer to tenant plan for service size, and location of the following utilities.

Domestic Water:

Water Service is Master Metered by the Landlord. The water supply is as follows

- Typical tenants
- Food court tenants
- Restaurant tenants
- Food service kiosks

3/4" cold water stub-out - valved and capped

1-1/2" cold water stub-out-valved and capped

1-1/2" cold water stub-out-valved and capped

3/4" cold water stub-out-valved and capped

Sanitary Sewer:

Sanitary sewer stub-out in slab block out area for lower level tenants, and below floor slab for upper level tenants.

All tenants

4" capped sanitary sewer stub-out

Sanitary Vent Piping:

All tenants

2" capped vent connection



Waste:

Sanitary sewer stub-out in slab block out area for lower level tenants, and below floor slab for upper level tenants.

Food Court and restaurant tenants

4" capped grease line stub-out

Gas Piping:

Typical tenants

2" gas stub, valved and capped in roof

Food court tenants

Gas meter located in service court area with 2" gas line extending to tenant space and capped. (Estimated connected load of 1250 cfh). Gas piping installation shall be by tenant

using LL'S contractor @ tenant's expense.

Restaurant tenants

Gas meter located in service court area with 3" gas line extending to tenant space and capped. (Estimated connected load of 2500 cfh). Gas piping installation shall be by landlord's

contractor at tenant's expense.

Tenant Responsibility:

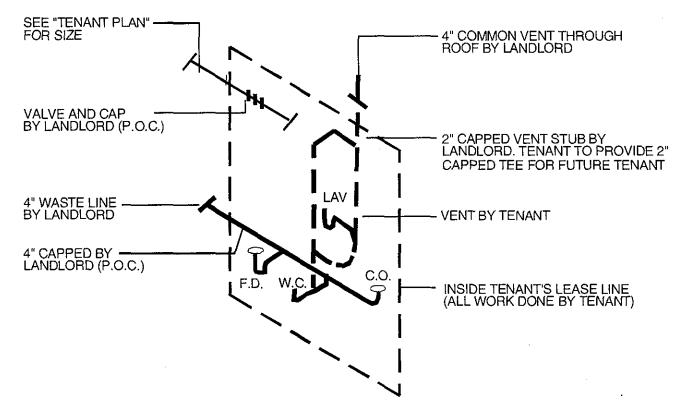
Tenant shall provide a complete plumbing system from Landlord's distribution point (supply stub-out) within the leased premises, including but not limited to, all necessary labor, connections to supply stubs, piping, clean-outs, fixtures, etc. necessary for the satisfactory operation of a plumbing system.

- Connection to Landlord's point of service and extend service according to tenant's requirements, applicable and local codes.
- Provide handicapped toilets facilities in accordance with Title III of American with Disabilities Act and local codes (refer to page 40).
- All toilets must be flush tank operated.
- Provide water proof membrane in water areas for all upper level tenants (i.e. toilet rooms, sink areas)
- Provide relief valve from water heater to nearest floor drain.
- Domestic water piping to be insulated with a minimum of 1" thick fiberglass insulation.
- At least one floor drain and cleanout in each toilet room, kitchen and or wet areas. (Min. 3").
- Sanitary piping shall be cast iron.
- Combustible piping (PVC) shall not be permitted through any floor, rated partition or tenant plenum areas.

Additional Food Related Tenant Responsibility:

- Connect to Landlord's point of service and extend service according to tenant's requirements and applicable and local codes.
- Each tenant will supply solenoid valves in their gas supply line that will be interconnected to the mall fire alarm system to ensure shut down of gas fired equipment.
- Tenant must provide a hand and three compartment sink. Mop sinks are suggested. Coordinate with local health department, as required.
- All gas piping shall be welded from Landlord provided tap.
- No gas piping in concealed spaces. Sleeved and vented as per code.





TYPICAL TENANT PLUMBING RISER NO SCALE

NOTES:

ALL DOMESTIC HOT AND COLD WATER PIPING WITHIN TENANT SPACE TO BE INSULATED WITH 1" THICK FIBERGLASS ALL SERVICE JACKET TYPE WRAP AROUND INSULATION.

ALL SANITARY PIPE TO BE CAST IRON.

ALL DOMESTIC WATER PIPING TO BE TYPE "L" COPPER TUBING.

P.V.C. PIPING IS NOT PERMITTED.

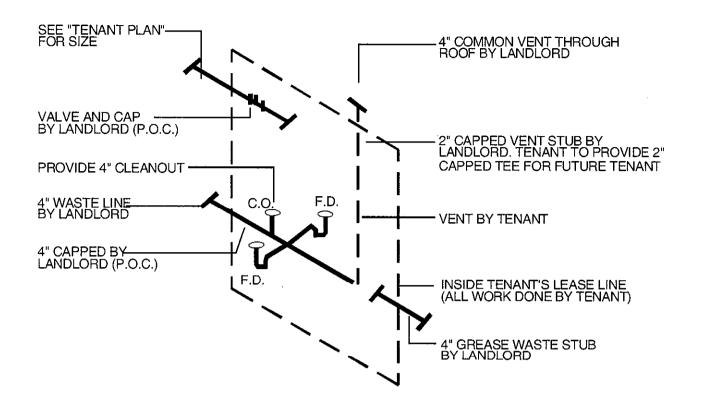
ALL TENANTS LOCATED ON MALL SECOND FLOOR MUST PROVIDE A WATERPROOF MEMBRANE UNDER FINISH FLOOR AND TURN UP 4" ON EACH WALL AT PLUMBING AREAS WITHIN SPACE.

TENANT IS TO PROVIDE AND INSTALL A BACKFLOW PREVENTER.

ALL TENANT WATER HEATERS SHALL HAVE RELIEF AND TANK DRAIN PIPED TO FLOOR DRAIN.

ALL TOILETS MUST BE FLUSH TANK OPERATED.





TYPICAL FOOD TENANT PLUMBING RISER NO SCALE

NOTES:

ALL DOMESTIC HOT AND COLD WATER PIPING WITHIN TENANT SPACE TO BE INSULATED WITH 1" THICK FIBERGLASS ALL SERVICE JACKET TYPE WRAP AROUND INSULATION.

ALL SANITARY PIPE TO BE CAST IRON.

ALL DOMESTIC WATER PIPING TO BE TYPE "L" COPPER TUBING.

P.V.C. PIPING IS NOT PERMITTED.

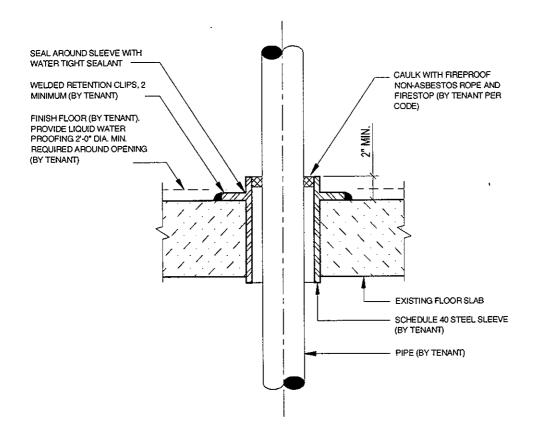
ALL TENANTS LOCATED ON MALL SECOND FLOOR MUST PROVIDE A WATERPROOF MEMBRANE UNDER FINISH FLOOR AND TURN UP 4" ON EACH WALL AT PLUMBING AREAS WITHIN SPACE.

TENANT IS TO PROVIDE AND INSTALL A BACKFLOW PREVENTER.

ALL TENANT WATER HEATERS SHALL HAVE RELIEF AND TANK DRAIN PIPED TO FLOOR DRAIN.

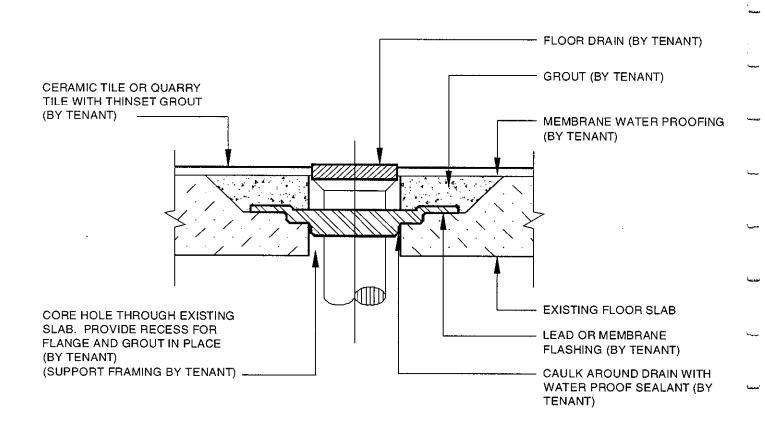
ALL TOILETS MUST BE FLUSH TANK OPERATED.





PIPE FLOOR PENETRATION NO SCALE





FLOOR DRAIN PENETRATION NO SCALE



RIVERTOWN CROSSING MEP DATA TABULATION SPACE #: NAME OF TENANT: GROSS LEASED AREA IN SQ. FT.

MECHANICAL	
CALCULATED DESIGN HEATING LOAD	
CALCULATED DESIGN COOLING LOAD	МВН
LANDLORD ALLOCATED AIR SUPPLY	MBH
CALCULATED AIR SUPPLY	CFM
MAKE-UP AIR SYSTEMS (S) (IF APPLICABLE)	CFM
TOTAL AIR SUPPLY	CFM
TOILET EXHAUST	CFM+
SPECIAL EXHAUST	CFM
TOTAL EXHAUST	CFM+
NEGATIVE/POSITIVE PRESSURE (AIR SUPPLY - EXHAUST)	CFM+
CALCULATED LOSS IN DUCTWORK	
CALCULATED S.P. LOSS IN DIFFUSERS, DAMPERS, ETC.	
TOTAL EXTERNAL STATIC PRESSURE IN WATER COLUMN	

ELECTRICAL		
SWITCHGEAR		
TRANSFORMER SIZE	KVA	
480Y/277V PANEL AMPACITY	AMPS	
480Y/277V PANEL - # CIRCUITS	VOLTS	
208Y/120V PANEL AMPACITY	AMPS	
208Y/120V PANEL- # CIRCUITS	AMPS	
INCANDESCENT LIGHTING	VOLTS	
FLUORESCENT LIGHTING		
RECEPTACLES	WATTS	
HEATING LOAD	WATTS	
COOLING LOAD	WATTS	
TOTAL (HEATING)(COOLING) LOAD	WATTS	
(WHICHEVER IS GREATER)	WATTS	
MISCELLANEOUS	WATTS	
SIGN		
TOTAL ELECTRICAL LOAD (CONNECTED)		
TOTAL ELECTRICAL LOAD (DEMAND)	WATTS	

PLUMBING

DOMESTIC H. W. HEATER STORAGE	GALLONS
NUMBER OF W. C. FIXTURE UNITS	
NUMBER OF LAVATORIES	
NUMBER OF COMMERCIAL SINKS	
OTHER EQUIPMENT USAGE	· GPM_
Note: This sheet must be included in final plans.	



FIRE PROTECTION ALL TENANTS

FIRE PROTECTION SYSTEM

The Landlord has installed a complete wet sprinkler fire protection grid system within the leased premises. The Landlord's contractor will perform all work within the Tenant's space, including all sprinkler heads and Tenant shall reimburse Landlord at a rate of \$3.00 per square foot in accordance with the lease.

Tenant's architect must submit a complete Reflected Ceiling Plan for the use of Landlord's sprinkler Contractor, who will perform all hydraulic calculations and will generate all sprinkler design drawings as required, by local authorities. Tenant or Tenant's contractor shall provide Landlord 1 week notice to schedule drops.

All modifications to the existing sprinkler grid system, relocation or installation of additional sprinkler heads, after the Tenant starts work, will be engineered by Landlord's contractor and charged to Tenant at cost plus 20 %.



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FIRE ALARM DRAWING REQUIREMENTS

These drawings shall be prepared by the Fire Alarm contractor designated by the Landlord to furnish and install all F/A systems in tenant's space at tenant's cost. (See information below)

- Label drawing sheet FA-1.
- Clearly label detector interface.
- Indicate location of audio/visual alarms and wiring diagram (audio/visual alarms required in every room per code).
- Indicate smoke duct detector if CFM is greater than 2000 CFM.
- Indicate fire related suppression interlock to Landlord's system (food related tenants).

LANDLORD SUPPLIED FIRE ALARM

Landlord has designed and installed a fire alarm system. A junction box is provided at each leased premises. Each junction box is provided with an audio/ visual alarm circuitry for signal interface connection with the building fire alarm system.

Tenant shall hire Landlord's contractor (listed below) to design, furnish and install a complete Fire Alarm system within the Tenant's space.

LANDLORD'S DESIGNATED CONTRACTOR

Buist Electric, Inc.

8650 Byron Center Ave.

Byron Center, Michigan 49315

Phone: 616/878-3315

Fax 616/878-3556



DESIGN CRITERIA	TENANTS NOTE



RiverTown Crossings

Grandville, Michigan a development of General Growth Properties, Inc.