BELMAR MALL
TENANT DESIGN &
CONSTRUCTION CRITERIA
PROPERTY SPECIFIC
REQUIREMENTS
1.0 PROPERTY INTRODUCTION

Belmar is a thriving retail and residential development in Lakewood, Colorado, a city located about eight miles west of Denver. Belmar is the destination for shopping, dining and entertainment and with over 80 local boutiques and national brands, options at Belmar are unlimited. Stores include Best Buy, DSW, Target, Century Theaters.

Belmar Mall is a vibrant reinvention of downtown Lakewood that evokes the ambiance of an old town village center. The district is based around a central plaza, ringed with cafe’s. The Mall spans 22 square city blocks and there is still room for growth. Designed to be an ever-changing project, Belmar was on the forefront of creating a high-density, mixed use development with an emphasis on getting around without a car.

1.1 BASE BUILDING INFORMATION

CONSTRUCTION TYPE:
Existing Mall Building: Type 2B Unprotected Noncombustible/ Fully Sprinkled

OCCUPANCY TYPE:
Primary Occupancy: Group M (Mercantile)
Occupancy Load: Per Code
Total Area: (Per A2)
Required Exits: Per Code

CODE INFORMATION
Building: City of Lakewood Building Code (IBC 2009)
Mechanical: 2009 International Mechanical Code
Plumbing: City of Lakewood Plumbing Code (IPC 2009)
Electrical: 2011 National Electrical Code
Fire: 2009 International Fire Code
Accessibility: American with Disabilities Act (ADA)
All Local Ordinances Having Jurisdiction

It shall be the Tenant’s responsibility to determine the edition of the above codes which are applicable (including supplements and state amendments) as codes are frequently revised and updated.

The most stringent requirement of the above-mentioned applicable codes shall govern each increment of the work.
1.0 PROPERTY INTRODUCTION

1.2 CONTACT INFORMATION

SHOPPING CENTER ADDRESS
7337 W. Alaska Drive, Suite 200
Lakewood, CO 80226

MALL GENERAL MANAGER
Lary Herkal
lherkal@starwoodretail.com
303-742-1506

MARKETING DIRECTOR
Janelle Hinton
jahinton@starwoodretail.com
303-742-1592

OPERATIONS DIRECTOR
Gary Billock
gbillock@starwoodretail.com
303-742-1749

BUSINESS DEVELOPMENT MANAGER
Cory Davis
cdavis@starwoodretail.com
303-742-1591

DIRECTOR TENANT COORDINATION
Ben Arbogast
barbogast@starwoodretail.com
303-742-1530

STARWOOD RETAIL PARTNERS
TENANT COORDINATION
1 E Upper Wacker Dr., Suite 3600
Chicago, IL 60601
tenantcoordination@starwoodretail.com
312-242-3200

BUILDING DEPARTMENT
City of Lakewood
480 S. Allison Parkway
Lakewood, CO 80226
303-987-7554

BUILDING DEPARTMENT
West Metro Fire Department
447 S. Allison Parkway
Lakewood, CO 80226
303-989-4307

FIRE DEPARTMENT
West Metro Fire Department
447 S. Allison Parkway
Lakewood, CO 80226
303-989-4307

GAS SERVICE
Xcel Energy
P.O. Box 9477
Minneapolis, MN 55484
800-895-2121

HEALTH DEPARTMENT
Jefferson County Department of Health and Environment
1801 19th Street
Golden, CO 80401

DATA / COMMUNICATION
Century Link Business
Sales: 866-476-9909
Support: 877-832-8404

Comcast/Xfinity Business
Sales: 855-609-3735
Support: 800-391-3000

FM GLOBAL
Residential
002374.50-02 Belmar
Retail & Parking
072546.90-31 Belmar
St. Louis
540 Maryville Centre Drive, Suite 400
St. Louis, MO 63141
314-453-9660

ELECTRIC COMPANY
Xcel Energy
P.O. Box 9477
Minneapolis, MN 55484
800-628-2121

WATER AND SEWER
Bancroft-Clover Water District
900 S. Wadsworth Blvd.
Denver, CO 80226
303-922-1113
1.0 PROPERTY INTRODUCTION

1.3 VICINITY MAP
1.0 PROPERTY INTRODUCTION

1.4 SITE PLAN
1.0 PROPERTY INTRODUCTION

1.5 ADDRESS PLAN (BLOCK 1)
1.0 PROPERTY INTRODUCTION

1.6 ADDRESS PLAN (BLOCK 2)
1.7 ADDRESS PLAN (BLOCK 3)
1.0 PROPERTY INTRODUCTION

1.8 ADDRESS PLAN (BLOCK 4)
1.0 PROPERTY INTRODUCTION

1.9 ADDRESS PLAN (BLOCK 5)
1.0 PROPERTY INTRODUCTION

1.10 ADDRESS PLAN (BLOCK 6)
1.0 PROPERTY INTRODUCTION

1.11 ADDRESS PLAN (BLOCK 7)
2.0 ARCHITECTURAL LEASE PLANS

2.1 LEASE PLAN
2.0 ARCHITECTURAL LEASE PLANS

2.2 NW LEASE PLAN BLOCKS 1 AND 2
2.0 ARCHITECTURAL LEASE PLANS

2.3 NE LEASE PLAN BLOCKS 3 AND 4
2.0 ARCHITECTURAL LEASE PLANS

2.4 SW LEASE PLAN BLOCKS 5 AND 6
2.0 ARCHITECTURAL LEASE PLANS

2.5 SE LEASE PLAN BLOCK 7
ARCHITECTURE AND FINISHES
3.0 ARCHITECTURE AND FINISHES

3.1 STOREFRONT DESIGN

- Specifically, the storefront frame must have a six-inch (6”) minimum height for its base. This minimum dimension will be required along the entire exterior storefront. In some cases, the base will vary due to grading conditions. In such cases the minimum height of the base will remain six inches (6”). The maximum height for the base of a Tenant storefront will not exceed 8” at the highest elevation of each storefront bay. The base material may be metal, cast-stone, stone, or ceramic tile. Plywood, particleboard or any exterior insulation finish system will not be permitted for use as a base material.
- All storefronts shall be self-supporting unless otherwise approved by the Landlord. The storefront may be braced to the base-building structure for lateral bracing only. No gravity loads may be suspended from the Landlord’s structure or bulkhead framing without the written approval of the Landlord’s structural engineer. No structural attachment will be allowed to the Landlord’s vertical neutral pier.
- The Base Building Structural Engineer has determined the following general wind design criteria for tenant storefront cladding per IBC 2009:
  - Basic wind speed = 100mph
  - Exposure = C
  - Iw = 1.0
  - Wind pressures and distributions in accordance with IBC 2000, §1609.0
  - Components and cladding parameters:
    - External pressure coefficient (GCp) = as per Figs’ 6-5 through 6-7 of ASCE 7, §6 (see IBC 2000, §1609.1)
    - Internal pressure coefficient (GCpl) = ± 0.18
- The project is located in a Seismic Category A per IBC designation

STOREFRONT DESIGN (continued)

- The Landlord retains the right to approve all locations of storefront entrances to ensure their compatibility with the Shopping District architecture, landscape, and pedestrian traffic patterns. The Tenant will coordinate door locations with varying grade conditions. The Tenant will be responsible for all transitions between the lease space and exterior grade conditions at door locations. All pedestrian ramps will meet all applicable codes.
- At least 80% of the storefront area will be transparent. For transparent areas use only clear, non-insulated, uncoated glass. Large opaque areas of storefront will not be permitted. All mullion frame colors, materials and glass samples will be submitted to the Landlord for review and approval. Mullion layout and dimensions will be reviewed and approved by the Landlord.

3.2 WINDOW DISPLAY

- The display zone is that area of the Tenant space that runs parallel from the storefront to a depth of five (5) feet into the space and remains in full view to the customer. Permanent built-in fixtures or partitions are not allowed in this zone.
- The Tenant will provide a drywall ceiling in the window display zone for a dimension of at least five feet (5) from the storefront into the space. The ceiling height within five (5) feet of the storefront must be equal to or greater than the height of the transparent area of the storefront glazing in line with it.
- The lighting in storefronts and store entrances will be a minimum of 30 foot-candles (initial average) with a maximum of 100 foot-candles measured at 3’0” above finish floor. The lighting will be circuited to tenant’s time clock. The Landlord shall determine the designated timeframe of illumination. The lighting will remain in operation after business hours.
3.0 ARCHITECTURE AND FINISHES

3.3 INTERIORS

• All interior sales floor finish materials, plant materials, lighting, and merchandising fixtures will be submitted to the Landlord for approval
• Interior Lighting can achieve an ideal lighting effect, mood, intensity and practicality by using such light sources as halogen, incandescent, and (color-corrected) metal halide. All interior retail sales floor illumination will be glare-free. All down lights will be adjustable and shielded from view. Lighting angle will be no greater than 35 degrees from vertical. Fluorescent lamps may be used either for general or ambient lighting but will have the highest level of color rendition
• All reflectors will have vertical baffles, metal parabolic, para-cube or para-wedge grid. Acrylic lenses are not allowed. Two (2') by four (4') foot lay-in ceiling fixtures are not allowed in the sales area. Suggested luminaries are indirect cove lighting, wall sconces, table and floor lamps, direct merchandise lighting or up-lights. Ceiling ambient lights will not be the only source of merchandise lighting
• Featured lighting such as decorative lighting, chandeliers, illuminated signs, neon/cold cathode and industrial type lighting (i.e. luminous ceilings, pendant fixtures, wall mounted fixtures, strip or tube lighting, etc.) and sequential lighting effects such strobes, spinners, or chase type lighting will be allowed only with prior written Landlord approval of the location, fixture type and fixture quantity prior to installation
• Due to the various grade elevations of the project, the ground floor retail spaces may vary in elevation. For those spaces that include more than one floor elevation, or spaces with floor elevations that do not meet the area development elevations at the desired main retail entry door, it will be the tenant’s responsibility to design, fabricate, and install the transition between levels within the parameters of all applicable codes
• All tenant space ceilings will be ten (10’) feet minimum clear height, except where otherwise noted in this design criteria or the LOD

INTERIORS (continued)

• The tenant will coordinate the ceiling design with all mechanical, electrical, plumbing, fire protection, lighting systems, and structural requirements. Tenant will provide access panels to Landlord or tenant equipment located above the ceiling where required by base building conditions or tenant design
• Tenant storage and equipment will be located out of public view. Storage above the ceiling is prohibited. Temporary storage and temporary trash accumulation in public areas or in any place visible to the public is prohibited. Open storage of garbage or trash is prohibited. Trash carts and bins will be covered and emptied before reaching full capacity
• Tenants are responsible for the closure and security of their leased premises including the merchandise therein. Roll down grilles are not allowed. Landlord provided items shall not be altered in any way

3.4 RESTAURANT

• All restaurants with exterior storefronts will be subject to all requirements as outlined in the criteria form storefronts and displays except that all areas adjacent to the storefront shall be utilized for seating, food and/or beverage display preparation (e.g. display kitchen, brewing tanks, etc.), or customer circulation. All second level restaurant tenants will provide a continuous handrail along balcony edges and/or window openings where required by applicable codes if the required handrail is not already part of the Landlord’s Base Building design. The Landlord shall approve any tenant handrail design prior to installation
• Due to the various grade elevations of the project, the ground floor retail spaces may vary in elevation. For those spaces that include more than one floor elevation, or spaces with floor elevations that do not meet the area development elevations at the desired main retail entry door, it will be the tenant’s responsibility to design, fabricate, and install the transition between levels within the parameters of all applicable codes
• All tenant space ceilings will be ten (10’) feet minimum clear height, except where otherwise noted in this design criteria or the LOD
• Restaurant Tenants are subject to all requirements as outlined in the Awnings and Tenant Signage sections of these design criteria. In addition, supplementary graphics (i.e. menu cases, easel signs, food displays, etc.) are encouraged subject to Landlord approval. Restaurants may have open or closed kitchens and must comply with all applicable codes
3.0 ARCHITECTURE AND FINISHES

RESTAURANT CRITERIA (continued)
• The Tenant will delineate the dining area with a railing, planters or decorative fences that are in conformance with local codes & regulations and as approved by the Landlord during the design and submission process. Any change in ground plane materials will require approval from the Landlord. Umbrellas and trellis elements over table areas are encouraged and require approval from the Landlord during the design process. Exterior dining furniture will be durable and manufactured for exterior use. Unique and creative furniture is encouraged. Queuing zones are delineated for the tenant on the LOD. No deviations from the areas indicated are allowed.
• All fixtures, furnishings and equipment, including kitchen equipment, will be included in the design presentation by the tenant to the Landlord.
• All artwork will be submitted at an appropriate scale for Landlord review of content.

3.5 AWNINGS
• Awnings are the eyebrows of the street. They protect the storefront window display area from sun exposure, reflection and glare. They also provide shelter for pedestrians from inclement weather. Cloth, metal or glass awnings in lively colors, patterns and form can add visual interest to the urban street scape. The awning can be an attraction to the customer, and an important factor in defining the image and extent of the tenant’s presence on the street.
• The Tenant, with consultation and approval by the Landlord, will determine the awning material, color and pattern. The criteria for specific buildings will determine the design parameters for the size and placement of a Tenant logo. Fabric awnings will be manufactured from Sunbrella or similar quality fabric. Tenants are encouraged to use metal or glass as awning materials as well. Internally illuminated or vinyl awnings are not allowed.

AWNING DESIGN CRITERIA (continued)
• Depending on the criteria for specific buildings, tenants may be required to provide an awning along each of their storefront bays designed and fabricated to the Landlord’s specifications. The tenant will provide the awning frame and material. Depending on the specific building criteria, the awning frame will be attached to the tenant storefront, in which case the tenant storefront will be structurally adequate for the purpose. All awning structure and attachment hardware will be of a finish that either matches or complements the awning color. All awnings will be designed as an integral component of the tenant’s overall identity. The awning armature will have the structural integrity to support the awning with not less than 100 mph wind load. The buildings have a Class “C” exposure. Refer to Section 1609 of the IBC for standard design parameters. The tenant will submit all methods of attachments for the awnings to Landlord for approval.

3.6 LIGHTING
EXTERIOR LIGHTING DESIGN CRITERIA
• The tenant is responsible for all lighting at the ground floor retail exterior elevation, the store entrances, and from the store facade to the lease line. Based on the lineal feet of store frontage (non-service frontage), the tenant must have percentages of exterior store facade lit.
• Tenants will provide illumination at the street sidewalk store entrances at all times with a minimum of 3 foot-candles, measured horizontally on the pavement at the street entrance doors. All exterior lighting will remain on from dusk to a time as may be determined by the Landlord.
• An appropriate level of illumination consistent with that utilized during business hours will be provided by the tenant in all storefronts at all times as determined above.
3.0 ARCHITECTURE AND FINISHES

EXTERIOR LIGHTING DESIGN CRITERIA (continued)
- Energy efficient fixtures with high color rendering index of 80 or more, long life lamps are required. Color temperature of all lamps will be nominally 3000K. These fixtures will be regularly maintained by the tenant. A dynamic storefront lighting design with color, sparkle and interesting patterns of lights are encouraged within the project. Exterior lighting provided by the tenant will be accomplished by one or more of the following options and as approved by Landlord
  - Sconces on columns
  - Downlights in canopies
  - Luminous panels
  - Lighted storefront
- In no case will tenant provided signs, awnings, or other added physical building features interfere with Landlord provided lighting or lighting in the public right-of-way
- All penetrations for lighting, or any other scope of work, through a building wall, partition wall or roof will be presented to the Landlord for its review of design and construction means and methods and approved by the Landlord in writing prior to all work by the tenant and its tenant contractor
- All exterior lighting will require tie-in to electronic time clock controls to maximize energy efficiency
- Manual switches are not allowed on exterior lighting
- Tenants will submit plans with control sequences identified to clearly define lights required for emergency egress paths, security lighting, general circulation, and decorative lighting

INTERIOR LIGHTING DESIGN CRITERIA
- Tenants will retain the services of a qualified professional lighting consultant with the expectation of creating dramatic and gratifying illumination of the tenant space
- Locate task and accent lamps in places where they can easily focus on the intended target without creating glare or hot spots

INTERIOR LIGHTING DESIGN CRITERIA (continued)
- In order to achieve the ideal lighting effect, mood, intensity and practicality, the following light sources are suggested as a guideline for developing a lighting plan: halogen, incandescent, and metal halide. All light sources will be warm tone unless there is a clearly defined color concept with a decorative multi-color effect. Other sources, such as LED’s and fiber optics should be considered for energy efficient effect lighting
- All retail store illumination will be glare free. All halogen, incandescent or metal halide down lights will be shielded to minimize glare and adjustable to aim away from external view. Minimal fluorescent lamps will be used for general or ambient lighting and will be shielded and concealed. Suggested light sources are indirect cove lighting, wall sconces, table and floor lamps, illuminated merchandise and or up-lights. Ceiling lights will not be the only source of merchandise lighting
- Display lighting will be adjustable and include shielding from the store exterior so that no direct light from interior fixtures intrudes beyond the store interior. Display lighting will be aimed to the side or to the rear of the display areas. Display lighting will not cause glare to the sidewalk pedestrian. Direct visual exposure of lamps (light bulbs) from the sidewalks is prohibited. Recessed or concealed lighting is strongly encouraged. Surface mounted display lighting will be concealed above the line of the storefront glass where possible
- Strobes, spinners and chase type lighting are not permitted
- Incandescent pendant units may be used for general lighting only if the tenant has established an identity based on this theme or motif and with prior approval by the Landlord. Exposed fluorescent tube strip lighting is not allowed in sales or public areas. Low-voltage recessed or surface track lighting is recommended for high impact on merchandise. All showcases and display cases will be adequately lit and ventilated. LED and fiber optic lighting should be considered. Direct visual exposure of incandescent lamps and/or fluorescent tubes are not allowed. To retain and protect the visual environment of the area for the benefits of all tenants, each individual tenant will control the brightness of the tenant’s lighting fixtures
3.0 ARCHITECTURE AND FINISHES

INTERIOR LIGHTING DESIGN CRITERIA (continued)

- Recessed incandescent down lights will be used for storefront illumination and will be accommodated with specular or semi-specular Alzak cone, and may be adjustable. Lamps will be above the ceiling line.
- General store lighting will be glare free fixtures. If fluorescent lighting is used, it will be recessed, and the shielding will be either metal parabolic, plaster para-cube, or para-wedge types. Acrylic lenses are not allowed for general lighting. HID lighting will have shielding as described above. No electrical components will contain materials classified as hazardous material.
- Tenants will submit specifications and original catalog sheets of operating fixtures to the Landlord for approval.

SIGN LIGHTING DESIGN CRITERIA

- Lighting for wall signage, blade signage, or environmental graphics will be circuited to tenant’s time clock. Maintenance of all tenant lighting that is located outside the limits of the leased space will be the responsibility of the tenant.
- Interesting, creative lighting is encouraged, including direct lit and indirect lit signs.
- Sign illumination shall not create objectionable glare to pedestrians, motorists, and adjoining residents. Internally lit cabinet signs are not allowed.
3.0 ARCHITECTURE AND FINISHES

3.7 ARCHITECTURAL DETAIL DRAWINGS

TYPICAL STOREFRONT CURB

DIAGRAM CURB AT TENANT RECESSED ENTRY

- Sealant and EJ by Tenant
- 4" Concrete Slab by Tenant
- 12" Compacted Sub Grade by Landlord, Fine Grading by Tenant
- Sidewalk by Landlord
- Grade Beam by Landlord
- Store Front by Tenant
- Storefront Concrete or CMU Curb by Landlord
- Storefront Finish to Grade by Tenant
- Sealant & EJ by Landlord
- Expansion Joint by Landlord
- Curb Cut by Tenant
- Conc. Infill by Tenant
- Sidewalk by Landlord
- Curb by Landlord
3.0 ARCHITECTURE AND FINISHES

SECTION AT TENANT STOREFRONT

TYPICAL TEMPORARY BARRICADE SECTION

NOTE:
APPLY NO FASTENERS TO BASE BUILDING SURFACES THAT WILL BE EXPOSED WHEN CONSTRUCTION IS COMPLETE.

PROVIDE FOAM INSULATION AT FACE OF BUILDING FOR PROTECTION AND WEATHER RESISTANCE.

SECURE TEMPORARY BARRICADE TO BASE BUILDING CONSTRUCTION THAT WILL BE CONCEALED WHEN CONSTRUCTION IS COMPLETE.

STOREFRONT OPENING
3"X4" STUDS @ 16" O.C.
3/4" EXTERIOR GRADE PLYWOOD

PAINT TWO COATS COLOR TO BE DETERMINED BY LANDLORD

STAKE STUDS 24" MIN. INTO SOIL

SOIL

CONC CURB
BY LANDLORD

FIRST FLOOR
EL. VARES

SECOND FLOOR
EL. VARES

LEASE LINE

48 LINEAR INCHES OF INSULATION, BY TENANT.
(5-VALUES MIN)

4" CONC SLAB, BY TENANT.

SEALANT & EJ, BY TENANT.

12" COMPACTED SUB GRADE, BY LANDLORD.
FINE GRADE BY TENANT.

FOUNDATION, BY LANDLORD.

METAL STUDS, INSULATION, VAPOR RETARDER, CONC CURB AND PRECAST FINISH, BY LANDLORD.

SEALANT & EJ, BY LANDLORD.

SIDWALK, BY LANDLORD.

STORFRONT, BY TENANT.

STORFRONT, BY TENANT.
STOREFRONT SIGNAGE
4.0 STOREFRONT SIGNAGE

4.1 GRAPHICS AND SIGN CRITERIA

INTRODUCTION
Belmar is a pedestrian shopping district serving as the new symbolic downtown of Lakewood, Colorado. This new urban mix will have restaurants, office space, residences, and retail creating a vibrant, bustling feel. Part of the unique attraction will be the awnings and signage complimenting the brick buildings and further enhancing the shopping experience. As each puzzle piece adds to the whole puzzle, each awning, sign, and store contributes to the shopping district. To create this experience, creative, innovative and unique signage and environmental graphics are encouraged at Belmar.

- The Tenant’s complete responsibility is to design, fabricate, install and maintain a unique graphic identity system. The Tenant must retain the services of a professional graphic designer to assist in the development of their interior and exterior graphic identity programs.
- In an urban setting, the variety of the awnings and signage can contribute to the overall appeal and experience. Conversely, shopping areas with little variation or extreme variation can detract from the overall appeal. Each building side, façade, or section requires a balanced appearance with regards to the awnings as they are an extension of the building.
- The goal of this criteria is to direct the graphics design to respect the building facades, the buildings, and the shopping district while encouraging innovative, unique designs.

SIGN TYPES AND NUMBER
- Multiple signs are allowed provided they avoid visual clutter and they enhance the experience of the shopping district. These may include wall signs, window signs, awning signs, temporary signs, and projecting signs. The number of signs must be subordinate to the overall presentation of the Tenant’s image.
- Wall signs:
  - Wall sign shall be aesthetically compatible with the Tenant’s storefront design and the architecture of the building.
  - The sign text of the wall sign shall be limited to trade name and logo only.
  - Wall signs may be composed of individually pin mounted letters, halo illumination, mounted to the building in the allowed signage zone. Penetrations through base building walls must be kept to a minimum. Background surfaces for these letters must be contained within the limits of the wall sign zone as defined in the Lease Outline Diagram. All lettering attached to a Tenant background surface must be pin mounted above that surface or have thickness. All Tenant lettering and, if used, background surfaces shall be at least 1/4” from the surface of the wall. All Tenant background surfaces must be within 2” of the building wall surface. Lettering may not project more than 3” from the building wall surface.
  - Wall mounted sign cabinets are not acceptable.
- Window Signs:
  - Any sign on the window, or behind the window, or within 20 feet of the window, and oriented to the street, shall be considered a window sign, and be controlled by the number and area requirements.
  - Window signs are not permitted above the ground floor.
  - All ground floor Tenants shall be allowed one window sign per bay as individually framed by a storefront system.
  - The total combined area of window signs should not exceed twenty-five (25) percent of the storefront as defined by the architectural bay.
  - The maximum window sign area per window bay for permanent signs either attached directly to the glass or within 5’ of the glass is seven (7) percent of the area defined from the storefront sill up 2’-4”.
  - Credit card signs posted either on the entrance door or on adjacent storefront glass are not permitted information shall be posted either on the entrance door or on adjacent storefront glass, with individual numerals and lettering not to exceed one square foot in area and with the font not to exceed 1” in height.
4.0 STOREFRONT SIGNAGE

SIGN TYPES AND NUMBER (continued)

- **Window Signs:**
  - A postal address number, required in Arabic numerals, shall not exceed one square foot. The font must be 4” high, with no less than 0.5” of stroke width. The text shall be white and clearly visible for Fire Department emergency identification, and may be located either on the storefront or on vertical awning flap.
  - Hours-of-operation information shall be posted either on the entrance door or on adjacent storefront glass with individuals numerals and lettering not to exceed one (1) square foot in area and with the font not to exceed 1” in height

- **Awning Signs:**
  - Any awning signs or logos shall be determined on an individual facade basis. For guidelines on the allowable graphics for a Tenant awning, refer to the Tenant Sign Guidelines diagrams specific to the typical bays of the Tenant’s leased premises
  - All awnings will be designed as an integral component of the tenant’s identity with respect to the shopping district and the building’s architecture. Awnings shall not be back-lit or internally illuminated

- **Projecting Signs:**
  - Some Tenants will be required to design and install one blade sign while some will not be allowed such a sign. The Tenant will fabricate and install the bracket. Complex shapes and three-dimensional letters or figures are encouraged. The blade sign must have two faces. The bracket design will include face lighting for each side for the blade sign. Internally illuminated blade signs are prohibited

DESIGN AND ATTACHMENT OF SIGNS

- Signs and related logo graphics should express a refined urban sophistication. Materials for signs shall complement the color, material and overall character of the architecture. Internally illuminated sign cabinets are not allowed
- Signs shall be constructed of high quality, durable materials to resist wear in an urban setting. All materials should be subject to the Landlord’s approval. Materials must be finished to withstand corrosion. All mechanical fasteners shall be of hot-dipped galvanized steel, stainless steel, aluminum, brass or bronze. All conduits, transformers, and other equipment shall be concealed and shall have UL ratings. Sign illumination shall not create objectionable glare to pedestrians, motorists, and adjoining residents
- Sign illumination should be integrated into the sign design
- All awnings will be attached to the Tenant’s storefront without exception
- Where signs attach to buildings, penetrations must be approved by the Landlord. All attachment methods must strive to minimize penetrations in the building’s face as each building face may be constructed of brick, pre-cast, metal accent panels or a combination. Signs attached to the buildings must have approved attachment methods shown on shop drawings. All electrical conduits must have approved penetrations as well
- Raceways are not permitted
4.0 STOREFRONT SIGNAGE

GENERAL CRITERIA

- To integrate signs with the building’s architecture
- To achieve visual and informational clarity
- To create a visual information corridor along selected street or portions of streets
- To avoid impacting adjoining residential neighborhoods with highly visible or bright signs
- To size the signs appropriate to the scale of its environment, and the role it plays in defining the street, sub-area, and architectural character
- To compliment the pedestrian experience
- The combined total area of wall and projecting signs shall not exceed the maximum square footage allowed for wall signs. Free-standing, monument, window and awning signs may exceed this recommended maxim
- In general, signs shall be located on the same lot as the permitted use

Signage / identity concepts
4.0 STOREFRONT SIGNAGE

GENERAL CRITERIA
• Signs shall not be located at the top of a building’s facade if the facade is higher than 50 feet and faces a residential neighborhood.
• Signs should generally be located within the lower 40% of a multi-story building’s facade. Exceptions may be warranted, particularly in any designated Visual Information Corridor, or for any environmental graphics.
• Signs should not be located within the facade of any residential portion of a mixed use building.
• To create signage that is expressive of the business activity for which they are displayed.
• To create an exciting nighttime character.
• To provide color, and interest through lighting accents.
• To encourage creative sign design through the use of unique two and three dimensional form, profile, and iconic representation.
4.0 STOREFRONT SIGNAGE

4.2 WALL SIGNS

GENERAL CRITERIA

• Ground floor in-line Tenants shall be allowed one wall sign per bay based on the lease street frontage. Corner tenants facing two streets shall be allowed a wall sign per bay on both facades.

• Where a ground-floor in-line Tenant, major Tenant, or major retailer may desire to orient to a street indirectly across an intervening space such as a parking lot, an additional wall sign may be allowed by the ACC, the size of which is calculated in the same way as the Tenant’s other allowable wall signs.

• Parking garages shall be allowed one wall sign per vehicular entry and exit. Such signs shall at least display a universal symbol of a bold letter ‘P’ within a circle, or the word ‘park’.

• Major retailers or major Tenants, whether ‘in line’ or free standing, shall be allowed one major wall sign for size per street-oriented facade, and one minor wall sign at any entry to the store.

• A free standing building with one Tenant (pad site building) shall be allowed one wall sign for each facade that can be seen from a street or parking lot, up to a total maximum of three wall signs per building.

Number of signs for ground floor tenant

Major retailer wall signs
4.0 STOREFRONT SIGNAGE

4.2 WALL SIGNS

GENERAL CRITERIA

- In-line Tenants, major retailers and major Tenants leasing more than one hundred (100) linear feet of frontage shall be allowed a wall sign with letters of up to four (4) feet in height. The sign shall be equal to no more than ten (10) percent of the exposed frontage on which it is located, up to a maximum of 150 s.f. per sign, and 400 s.f. Total for all wall and projecting signs, and no more that sixty-seven (67) percent of the lease width. Signs shall be no closer than five (5) feet from the lease line. Major retailers or major Tenants may be allowed larger signs, or required to have smaller signs, at the discretion of the ACC.

- In-line Tenants leasing more than forty (40) and less than one hundred (100) linear feet of frontage shall be allowed a wall sign with letters of up to three (3) feet in height. The sign shall be equal to no more than ten (10) percent of the exposed frontage on which it is located, and no more that sixty-seven (67) percent of the lease width. Signs shall be no closer than five (5) feet from the lease line.

- Wall signs shall also be allowed to increase in area and size to create environmental graphics for certain areas and buildings within a Visual Information Corridor as defined in specific Sub-area sign design standards and guidelines.
4.0 STOREFRONT SIGNAGE

4.2 WALL SIGNS (continued)

GENERAL CRITERIA

- In-line Tenants leasing less than forty (40) linear feet of frontage will be allowed a wall sign with letters of up to two (2) feet in height. The sign shall be equal to no more than ten (10) percent of the exposed frontage on which it is located, and no more that seventy-five (75) percent of the lease width. Signs shall be no closer than two and one half (2.5) feet from the lease line.

- Wall signs for free-standing buildings with one Tenant (pad site buildings) shall not be greater in area than eighty (80) square feet each, nor greater than 200 square feet total for all wall signs.

- Wall signs for free standing buildings with one tenant, or with a major Tenant, where the building or major Tenant area is greater than 20,000 s.f., shall not be greater than 10% of the exposed frontage of building or major Tenant, or 150 s.f. per sign, or 400 s.f. Total for all wall and projecting signs. Major retailers or major Tenants in free standing buildings may be allowed larger signs, or may be required to have smaller signs, at the discretion of the ACC.

- Wall signs located in signable areas above the ground floor shall complement or accent the building’s architecture, and be located on facades generally devoid of windows.

Unacceptable wall signs

Examples of signable areas
4.0 STOREFRONT SIGNAGE

4.2 WALL SIGNS (continued)

GENERAL CRITERIA

• Wall signs shall be mounted in the signable area. Signable areas shall be shown on a Sign Plan. The signable area for in-line ground floor Tenants is defined as extending from the top of the awning or storefront glazing to the sill of the next Tenant’s window above the ground floor Tenant, or architectural wall element, such as a belt course, that is associated with that floor. If no other Tenant occupies space above the ground floor Tenant, and the architecture is designed to accept signs, the signable area may extend to a cornice line or approximately two (2) feet below the top of parapet or eave.

• Wall signs located in signable areas above the ground floor shall compliment or accent the building’s architecture, and be located on facades generally devoid of windows.

• Wall signs shall be composed of individually mounted letters, internally illuminated channel letters, logos, or icons without sign backings unless the ACC expressly determines that special design considerations warrant an exception.

• When individual letters are mounted on storefront spandrel panels, the spandrel panel shall not be counted as a sign backing if it is of the same color and material as the storefront, and if the letters are raised or have thickness.

Wall sign that fits with architecture of building and is generally devoid of windows.
4.0 STOREFRONT SIGNAGE

4.2 WALL SIGNS (continued)

GENERAL CRITERIA

• Wall signs may be composed of individual letters made from fabricated stainless steel, painted cut-out aluminum, cut-out natural brass or bronze, cast aluminum, or bronze in flat or prismatic profiles

4.3 PROJECTING SIGNS

GENERAL CRITERIA

• Each ground floor Tenant shall be allowed one projecting sign or arcade sign per bay or lease width for each street oriented facade
• Each parking garage is allowed one projecting sign for each vehicular entry or street oriented facade
• Each major retailer or major Tenant is allowed one projecting sign per street oriented facade. Additional projecting signs and banners may be granted by the ACC to major retailers or major tenants in order to add interest to big, blank walls. Size limitations may be waived if a larger scale of sign or banner is warranted
• Each free standing (pad site) building with a single Tenant or major Tenant is allowed one projecting sign for each street oriented facade

Three dimensional parking garage entry sign
4.0 STOREFRONT SIGNAGE

4.3 PROJECTING SIGNS

GENERAL CRITERIA

• Ground floor Tenants, free standing buildings, major retailers and parking garages with 100 linear feet or more of frontage may have up to 96 cubic feet of total projecting sign volume for all projecting signs.

• Ground floor Tenants, free standing buildings, major retailers, and parking garages with less than 100 linear feet but more than 40 lineal feet of frontage may have up to 64 cubic feet of total projecting sign volume for all projecting signs.

• Ground floor tenants or free standing buildings with less than 40 lineal feet of frontage may have up to 30 cubic feet of total projecting sign volume for all projecting signs. However, to avoid crowding of sign types, Tenants that occupy less than 30 linear feet of frontage may be limited to utilizing either a projecting sign or a wall sign at the discretion of the ACC.

• For the purposes of calculating sign area limitations, a cubic foot of sign or graphic volume is equivalent to a square foot of sign area. Only one sign face of a generally two dimensional projecting sign shall be used in the calculation of sign area requirements.
4.0 STOREFRONT SIGNAGE

4.3 PROJECTING SIGNS (continued)

GENERAL CRITERIA

• The volume of a projecting sign shall be determined by a rectangular volume drawn around the primary form of the sign. Minor elements may exceed the boundaries of the permitted volume.

• A projecting sign may extend higher than the signable area of a ground floor tenant if: 1) the architecture is designed to accept such signage, or can receive such signage without conflicting with its design; and 2) the projecting sign does not extend into the facade of a residential use. If the facade is largely devoid of windows, a projecting sign may extend to the limits of the signable area of a wall sign, or, with ACC approval, above the top of a parapet, or roof eave.

• Where a facade includes windows, the top of a projecting sign should not extend higher than the head of a second story window.

• Projecting signs composed of rectangular or square sign cabinets with internally illuminated Plexiglas sign faces shall not be allowed.

• Projecting (blade) sign panels should be unique and interesting in shape and profile.

• Projecting sign graphics should be three-dimensional complex shapes, letters, logos or icons.

Example of a projecting sign volume

Projecting signs extending higher than the ground floor tenant zone
4.0 STOREFRONT SIGNAGE

4.4 FREESTANDING OR MONUMENT SIGNS

GENERAL CRITERIA

• Each freestanding building with one Tenant (pad site building) may be allowed one freestanding or monument sign. Pad site tenants with drive-through facilities are allowed in addition to the one monument sign, a single board menu sign.

• The maximum area for a free-standing or monument sign for a major retailer or a Joint Identification Sign is 150 square feet. The maximum area may be increased at the discretion of the ACC.

• The maximum area for free-standing or monument sign for a non-major retailer pad site building is 32 square feet.

• Free-standing, joint identification signs, or monument signs for free-standing buildings with one Tenant (pad site buildings) shall be not be greater in height than twelve (12) feet. The maximum area may be increased at the discretion of the ACC. Menu board height shall be limited to 6 feet.

• Sign setbacks are not required.

• Free-standing signs are allowed only if the design of such signs shall exceed in creativity and quality a typical freestanding pole sign.

• Monument signs are preferred rather than free-standing signs.
4.0 STOREFRONT SIGNAGE

4.5 WINDOW, AWNING AND ARCADE SIGNS

GENERAL CRITERIA

• Each separate awning is allowed one sign or logo
• All ground floor Tenants shall be allowed one window sign per window as individually framed by a storefront system, and a total of up to three ground floor window signs. Any sign on the window, within or behind the window
• All Tenants shall be allowed one arcade sign. Either an arcade sign or a projecting sign is allowed, but not both
• Any sign on the window, or behind the window, or within 20 feet of the window, and oriented to the street, shall be considered a window sign, and be controlled by the number and area requirements
• Window, awning, and arcade signs shall be of a size and total area related to pedestrian, not vehicular, scale and view
• The maximum amount of sign area per awning is 10% of the sloped awning panel, up to a maximum of 10 square feet. Signage shall not be allowed on an awning’s side panels (if any)
• The maximum amount of sign area per face of an arcade sign is 20 square feet
• The maximum window sign area per window is five (5) percent of the area of that window

Example of window areas used to calculate window signs.
4.0 STOREFRONT SIGNAGE

4.5 WINDOW, AWNING AND ARCADE SIGNS

GENERAL CRITERIA

• Awning location, size, and shape shall complement the design of the facade and storefront
• Window signs are not permitted above the ground floor
• Awning width should not exceed the width of the storefront between the inside edge of the building bay piers
• The sign should complement the window display

Awning example

- SLOPED AWNING PANEL
- AWNING SKIRT
5.0 ENGINEERING GUIDELINES

5.1 HVAC SYSTEM

HVAC (Refer to Appendix E: MEP Systems Building Matrix, Section 5.6)

VAV SYSTEM

Landlord supplies cooling air from the base building rooftop units to within each tenant space through medium or low pressure ductwork. Cooling air is delivered at no warmer than 63 degrees F, and is maintained between 55 degrees F and 63 degrees F, Blocks 3, 4 and 5 maintain 50 degrees F and 63 degrees F at all times. Tenants connect to the medium pressure duct main with cooling-only VAV boxes, or heating /cooling fan powered VAV boxes with electric reheat coils, to provide interior and exterior zone temperature control.

CONDENSER WATER

Blocks 6 and 7 utilize a condenser water system; Landlord provides a source of condenser water to the Tenant’s premises. Condenser water is supplied between 70 degrees F and 85 degrees F by the Landlord’s boilers and cooling towers, and will be utilized with the Tenant’s water source heat pumps to provide interior and exterior zone temperature control.

Landlord’s condenser water system operates all year during business hours only, and Landlord’s condenser water will not be used for any use other the air conditioning equipment. Each Tenant will provide flow meter stations on any hot water, or condenser water services utilized.

BLOCK 2: 2M1 AND 2B1

The air conditioning system being utilized at these buildings is a heat pump cooling system utilizing Climate Master heat pumps. The building provides BTU metered condenser water.

BLOCK 2: 2B2

The air conditioning system being utilized in 2B2 consists of 2 Trane Rooftop Units maintained by the tenants, Staples and Vein Care Clinic. The expansion area would require its own new unit. There are two units on the second level of the 2 G garage.

BLOCK 2: 2M3 OFFICE AREAS

The air conditioning system being utilized at building 2M3 is an indirect/direct evaporative cooling system that takes advantage of Denver’s low outside wet bulb temperature. The roof top units supply 100% outside air which greatly improves ventilation over normal systems that usually distribute 20% outside air during the cooling season. The units do not have a mechanical refrigeration system thus reducing the possibility of a refrigeration leak which would adversely impact the environment. The air washing effect of evaporative cooling reduces dust and airborne pathogens providing for a better indoor environment.

Conditioned air is supplied to interior and perimeter spaces by means of a common constant pressure supply plenum (under the floor). As interior loads do not change greatly, individual outlets are manually adjusted by the space occupants according to individual preference. Perimeter zoning is accomplished by use of fan terminals located in the floor plenum and controlled by zone thermostats. Perimeter heating is incorporated in the form of heating coils within these terminal boxes. Conventional floor grilles are used to project warm air to counteract window down-drafts. These units deliver constant volume airflow to the spaces and may be used for space heating and/or cooling. Primary negative issue is the systems inability to condition on warm humid days.
5.1 HVAC SYSTEM (continued)

BLOCK 2: 2M3 RETAIL SPACES

The retail spaces use the same type of systems as the office area with the exception of the roof top units have mechanical cooling when the outside temperature exceeds its set point that comes on. The air then is supplied to the retail tenants VAV box or fan powered box that also has electric heating. Tenants are billed based on CFM.

BLOCK 2: 2M4

The air conditioning system being utilized at building 2M4 is a York mechanical refrigeration system. The air then is supplied to the retail and office tenants VAV box or fan powered box that also has electric heating. Ambulatory has their own RTUs and boilers for their surgical areas and maintains these systems. We do supply air to their lobby area. Tenants are billed based off of CFM’s for both retail and office, excluding PF Chang’s and Ambulatory, who have their own system.

BLOCK 3: 3M1

The air conditioning system being utilized at building 3M1 is a York mechanical refrigeration system. The air then is supplied to the retail and office tenants VAV box or fan powered box that also has electric heating. Tenants are billed based on CFM.

BLOCK 3: 3B1

The air conditioning system being utilized at building 3B1 is a York mechanical refrigeration system working the same as building 3M1. The air then is supplied to the retail and office tenants VAV box or fan powered box that also has electric heating. Tenants are billed based off of CFM. 24 Hour Fitness has their own HVAC equipment that they maintain.

BLOCK 4: 4B1

The air conditioning system being utilized at building 4B1 is a mechanical refrigeration system that supplies refrigeration cooling and gas heating to each of the big box stores. Each store is responsible for the maintenance of these units. Each Tenant has their own unit.

BLOCK 4: 4B3

The air conditioning system being utilized at building 4B3 is a mechanical refrigeration system that supplies refrigeration cooling and heating to each of the retail stores. Each store is responsible for the maintenance of these units. Each Tenant has their own unit.

BLOCK 5: 5M1 AND 5M2

The air conditioning system being utilized at building 5M1&2 is a Carrier mechanical refrigeration system. The air is supplied to the retail and office tenants through VAV box or fan powered boxes. There is electric heating. Tenants are billed based off of CFM.

BLOCK 6: 6M2 AND 6M3

The air conditioning system being utilized at building 6M2 and 6M3 is a heat pump cooling system utilizing Mammoth and Climate Master heat pumps in 6M2. The cooling towers are located on the roof and the boilers and pumps are in the basement for 6M2 Tenants. The towers, boilers and pumps for 6M3 are located in the mechanical room on the top floor. They supply the water to all the residential and retail tenants The HOA maintains the building systems.
5.0 ENGINEERING GUIDELINES

BLOCK 7: 7M1, 7M2 AND 7M4 B

The air conditioning system for Block 7 is a heat pump cooling system utilizing Climate Master heat pumps. The 2nd floor has the cooling towers and boilers for this system, as well as a condenser booster pump in 7M4.

HVAC load calculation: Tenant to submit a detailed computer generated load calculation based on sensible load to justify request for conditioned air or condenser water. Tenant’s room temperature shall be 75°.

Intake/Exhaust Systems:

<table>
<thead>
<tr>
<th>Intake/Exhaust Systems</th>
<th>All outside ventilation needed for the anticipated Tenant use is provided through the medium or low pressure supply ductwork from the rooftop units. The Landlord will provide outside air louvers for the Tenants’ use in buildings with heat pump systems and such locations shall be noted in the L.O.D. and/or the Base Building construction drawings. Any additional outside air needed by the Tenant for their operations (hood exhaust, toilet exhaust, additional population, etc.) will be provided using Tenant equipment for heating, cooling and make-up air. Any additional Tenant-installed outside wall penetrations, type, size, and quantity, will be located in the rear exterior wall only and will require prior written approval of the Landlord. Tenants will provide a complete toilet exhaust system as required by Code for tenant toilet rooms. The tenant will have the location of all fresh air intakes and exhausts approved by the Landlord and must ensure that the distance between fresh air intakes and toilet exhaust discharges are in accordance with code.</th>
</tr>
</thead>
</table>

5.2 ELECTRICAL (ALL TENANTS)

Voltage: 277/480V, 3ph, 4-wire.

Power: Tenant is a direct customer of the Utility Company, Tenant is responsible to pay all fees and purchase electrical meter. If any part of the Tenant’s electrical service/installation is not existing, Tenant shall install and/or furnish all equipment, conduit, wiring, etc.

Capacity: Per available capacity from Mall, size of incoming power must be coordinated with the Mall.

Telephone: Use existing conduit or Tenant to provide.
5.0 ENGINEERING GUIDELINES

5.3 PLUMBING (ALL TENANTS)

Water: Landlord has provided domestic water connection for Tenants to utilize.

Tenant is responsible to provide Neptune T-10 water sub-meter to read in gallons with no multiplier. Installed no more 5 feet off floor in accessible area,

Waste: 4” connection off Landlord main. Designated connection point within or adjacent to space.

Vent: If tap is not provided, then vent through roof, maintaining minimum distances from fresh air intakes. Landlord roofing contractor must be used.

Grease Waste: By Tenant per local authority requirements. Tenant is responsible to meet all local authority requirements for grease waste and sanitary line terminations.

Natural Gas: Tenant shall verify availability; Tenant is direct customer of the Utility Company. Tenant to provide meter, and route gas service to their space.

General: No PVC or PEX above ground

5.4 LIFE SAFETY (ALL TENANTS)

Sprinklers: Tenant shall directly employ the Landlord designated contractor to install and/or modify the existing grid or utilize connection provided.

All design shall be approved by all authorities having jurisdiction, the Landlord and the Insurer.

Tenant Flow Switch: Yes. To be clearly marked in ceiling.

Valve for Tenant Space: Yes. To be clearly marked in ceiling.

Fire Alarm: General Contractor is required to use the designated base building Fire Alarm Contractor to complete all Fire Alarm (smoke detectors/duct smoke detectors) work within Tenant’s premises at Tenant’s cost.

Building panel is monitored by the Landlords monitoring vendor. All monitored points, notification and annunciation devices within the Tenant space are the responsibility of the Tenant.
5.0 ENGINEERING GUIDELINES

5.5 RESTAURANT AND ODOR TENANTS

HVAC CRITERIA

Grease Exhaust: Tenants with no direct access to the roof are required to utilize a pollution control equipment to prevent a majority of the grease/smoke/odor laden particulate matter from entering the atmosphere.

Food Service Tenants shall provide high efficiency grease filters.

Tenant exhaust operation must maintain a negative air balance to the kitchen from the dining area.

Protect roof with “Grease Guard” containment system.

Replacement Air: From Tenant outside air and/or dedicated make-up air units (90% of all exhaust).

Odor, Thermal & Process Equipment Exhaust: Odor producers (pets, hairstyling, nail salons) must maintain a minimum of 20% negative air pressure between their space and the mall common area. Pollution Control Unit may be required to mitigate odors.
5.0 ENGINEERING GUIDELINES

5.6 APPENDIX E: HVAC SYSTEMS DESCRIPTIONS

System Type – VAV DX RTU (VAV RTU)
- Packaged rooftop HVAC units, similar to York or Trane, with air cooled electric DX refrigerant cooling coil, enthalpy based free cooling (economizer) cycle, gas fired furnaces for heating, 30% filters, variable speed drive for VAV air control, and plenum type roof curb
- Medium pressure supply duct shall be provided under the core and shell project from the rooftop unit through a vertical riser shaft to terminate above the ceiling at each floor. Return air duct shall be provided under the core and shell project from the ceiling plenum back to the rooftop unit. Medium pressure duct main around the floor shall be provided under the Tenant fit-up
- Fan powered series type VAV boxes with electric heating coils and local zone thermostat shall be provided under the Tenant fit-up for the tenant exterior zones, and cooling only VAV boxes with local zone thermostat shall be provided under the Tenant fit-up for the Tenant interior zones
- Exterior zones will be based on a maximum of 50 LF of exterior wall (750 SF total). Interior zones will be based on a maximum of 2000 SF of interior space. All zones will be grouped by common use and occupancy
- Low pressure distribution duct and diffusers downstream of the VAV boxes shall be provided under the Tenant fit-up
- DCC Controls by Setpoint Systems

System Type – Constant Volume DX RTU (CV RTU)
- Packaged high-efficiency rooftop HVAC units, similar to Trane Voyager, with air-cooled electric refrigeration cooling cycles, enthalpy based free cooling (economizer) cycle, gas fired furnaces for heating, 30% filters, and roof curb
- Low pressure distribution duct and diffusers downstream of the rooftop unit connection shall be provided under the Tenant fit-up
- DCC Controls by Setpoint Systems

System Type – Water Source Heat Pump (HP)
- Water source heat pumps, with condenser water system, closed circuit evaporative fluid cooler, and condenser water pumps
- Base case heat pumps utilize R=22. High efficiency R-22 heat pumps add approximately 10% to base heat pump cost. High efficiency R-410a heat pumps add approximately 20% to base heat pump cost
- Chemical water treatment for the condenser water systems
- Retail unit ventilation shall be provided through outside air intake louvers in the building wall as shown in the L.O.D.
- Electronic thermostats

System Type – Split Heat Pump
- Wall mounted split system type heat pump units, with outdoor roof or grade mounted condensing units, similar to Mitsubishi or Sanyo. Provide wall-mounted thermostat to control unit, and refrigerant piping between units in accordance the manufacturer’s recommendations
- Electronic Thermostats
5.0 ENGINEERING GUIDELINES

System Type – ID/D Evap. RTU

- Packaged rooftop 100% outside air HVAC units, similar to Governaire or Energy Labs, with indirect/direct (ID/D) evaporative cooling, enthalpy based free cooling (economizer) cycle, gas fired furnaces for heating, 30% filters, variable speed drive for VAV air control, and vibration isolation plenum type roof curb
- For the first floor retail areas, medium pressure supply duct shall be provided under the core and shell project from the rooftop unit through a vertical riser shaft to above the ceiling of the first floor. Medium pressure duct main around the floor shall be provided under the core and shell project
- At the first floor, a standard ducted above the ceiling system is utilized. Fan powered series type VAV boxes with electric heating coils and local zone thermostats shall be provided under the Tenant fit-up for the Tenant exterior zones, and cooling only VAV boxes with local zone thermostats shall be provided under the tenant fit-up for the Tenant interior zones. Low pressure distribution duct and diffusers downstream of the VAV boxes shall be provided under the Tenant fit-up
- DCC controls by Setpoint Systems

System Type – Constant Volume DX Fan Coil (DX FCU)

- Packaged DX fan coil unit with remote outdoor condensing unit and electric heat
- Low pressure distribution duct and diffusers downstream of the fan coil unit connection shall be provided under the tenant fit-up or as noted
- Electronic thermostat
5.0 ENGINEERING GUIDELINES

5.7 BUILDING NUMBERS FOR ENGINEERING CRITERIA