

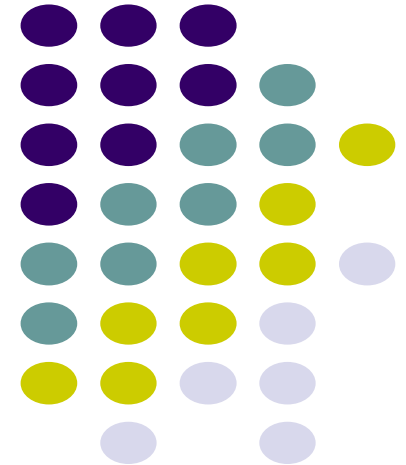
# City of Scottsdale Green Code Adoption



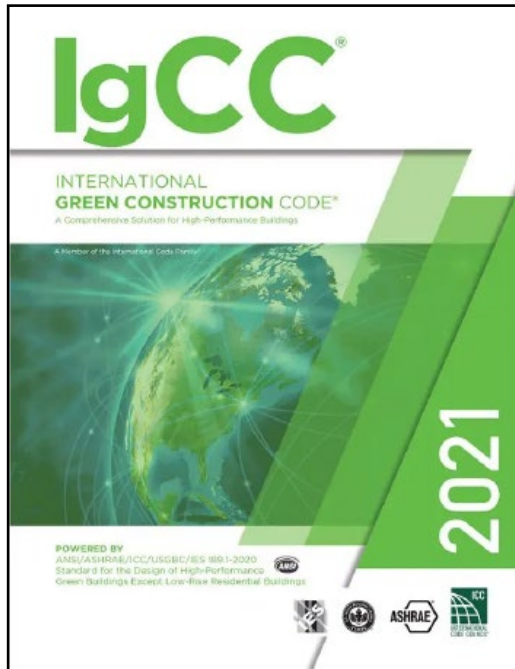
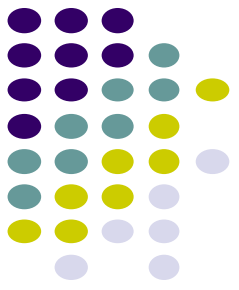
## Top 10 Green Code Provisions 2021 International Green Construction Code

April 16, 2024

Anthony Floyd, FAIA, LEED BD+C, NOMA  
Office of Environmental Initiatives  
Planning and Development  
Community and Economic Development  
City of Scottsdale



# IgCC Adoption as Mandatory Code Multifamily and Commercial



- **IgCC Categories**
  - Site Sustainability
  - Water Use Efficiency
  - Energy Efficiency (IECC)
  - Indoor Environmental Quality
  - Materials and Resources



Scottsdale is the first jurisdiction in the state to adopt a mandatory green construction code and one of the first in the nation.

# International Green Construction Code

## Application

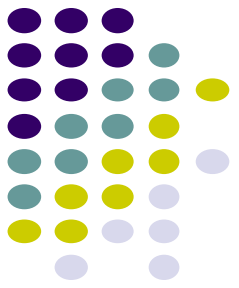
- New commercial, multifamily, remodels and TIs
- LEED is deemed to comply

## Scope

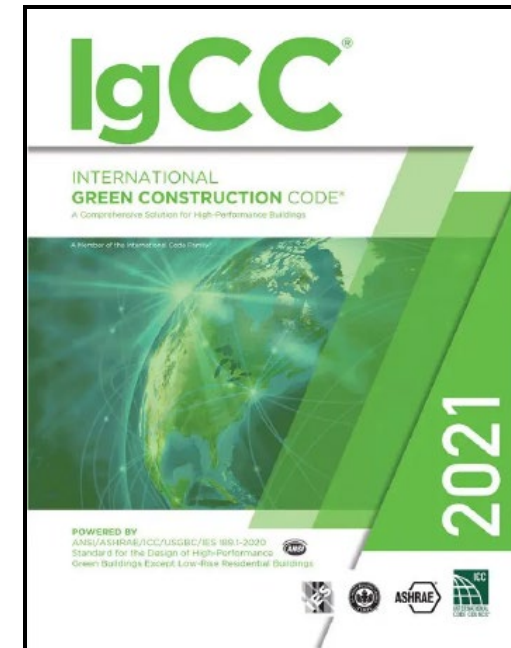
- Heat Island Mitigation
- Indoor and outdoor water efficiency
- On-site renewable energy
- Indoor environmental quality
- Construction waste management
- Recycling infrastructure
- Reduced impact building materials



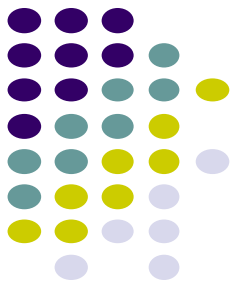
# IgCC for Multifamily and Commercial



- **Top 10 Green Code Provisions**
  1. Heat Island Mitigation
  2. Water Use Efficiency
  3. Cool Roofs
  4. On-Site Renewable Energy
  5. Solar-Ready Zone
  6. EV Charging Infrastructure
  7. Construction Waste Management
  8. Recycling Facilities
  9. Reduced Impact Materials
  10. Indoor Environmental Quality



Highlighted text applies to both new construction and tenant improvements. All others only apply to new construction.



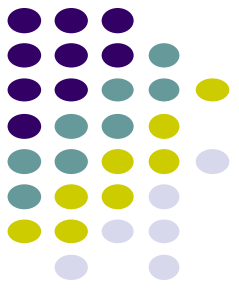
# 1 IgCC and Site Sustainability

## Head Island Mitigation

- At least 50% of site hardscape shall be shaded by structures or trees
  - or -
- Light color paving surfaces with a solar reflective index (SRI) of 29 or more



## 2 IPC/IECC/IgCC Water Conservation



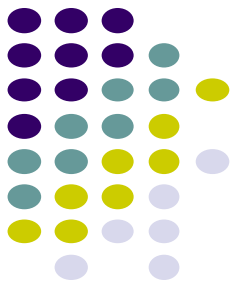
### Water Efficiency in Plumbing, Energy and Green codes

- High-efficiency plumbing fixtures and fittings
  - Water closets, urinals, lavatory faucets, showerheads, kitchen faucets
- Efficient hot water delivery
  - Pipe insulation and circulation pumps for remotely located water heaters
- Commercial food service operations
  - High-efficiency prewash spray valves
  - Dishwashers and ice machines
- Water-bottle filling stations
  - Water-bottle filling stations for all drinking fountains



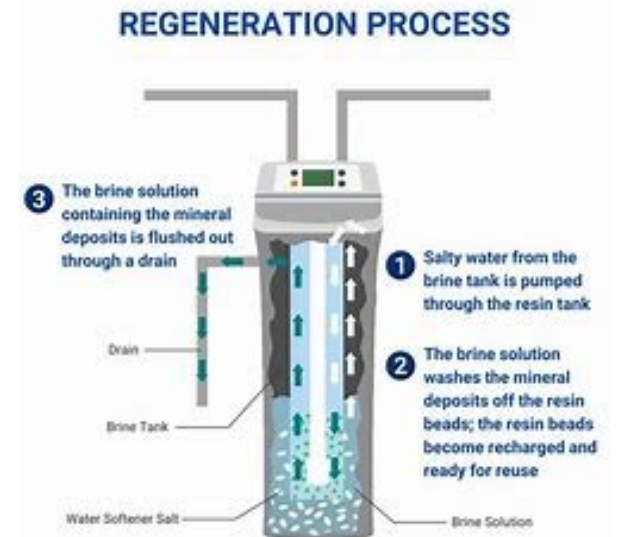
## 2

# IgCC Water Conservation



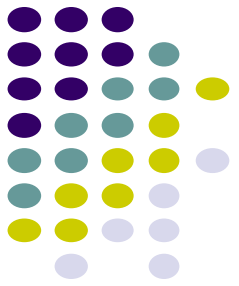
## Water Efficiency in Green codes

- Water softeners
  - Water softeners shall be equipped with demand-initiated regeneration control systems. Timer-based control systems are prohibited.
- Reverse osmosis water treatment
  - Reverse osmosis systems shall be equipped with an automatic shutoff valve that prevents the production of reject water when there is no demand for treated water.
- Water efficient HVAC systems
  - Once-through cooling with potable water is prohibited.



# 2

# IgCC Water Conservation



## Outdoor Water Efficiency

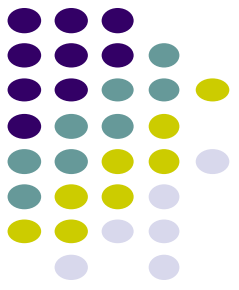
- Weather-based smart controllers that are WaterSense labeled
- Efficient irrigation system design



Powell and Sons





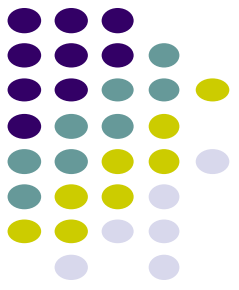


# 3 IECC/IgCC Cool Roofs

## Low Slope roofs (less than 2 in 12 slope)

- Solar reflectance index (SRI) of 64 or higher over conditioned and non-conditioned spaces





## 4 IgCC and Renewable Energy

- **On-site solar PV system** shall be provided with a total rated capacity of one of the following:
  1. Not less than 3% of estimated annual energy used within the building for heating, cooling and lighting
  2. Not less than 2 watts per sq. ft. of roof area over conditioned space

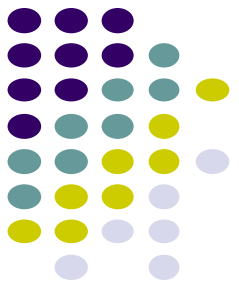
### **Exceptions:**

1. Building floor area less than 5,000 sq ft
2. Energy efficiency measures resulting in 20% annual energy savings



# 5

## IECC and Renewable Energy



### ● Solar-Ready Zone

- Minimum 40% of roof area free and clear of obstructions

#### Exceptions:

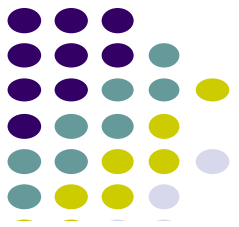
1. A building with an installed, on-site renewable energy system
2. Roof areas obstructed by roof decks, walkways, equipment, vents, skylights



Credit: Carlisle Roof Foam

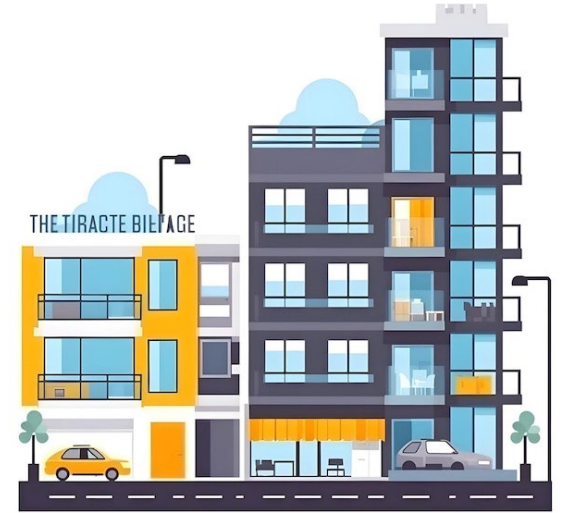
# 6

## Electric Vehicle Capable Charging 2021 IECC Section C405.13

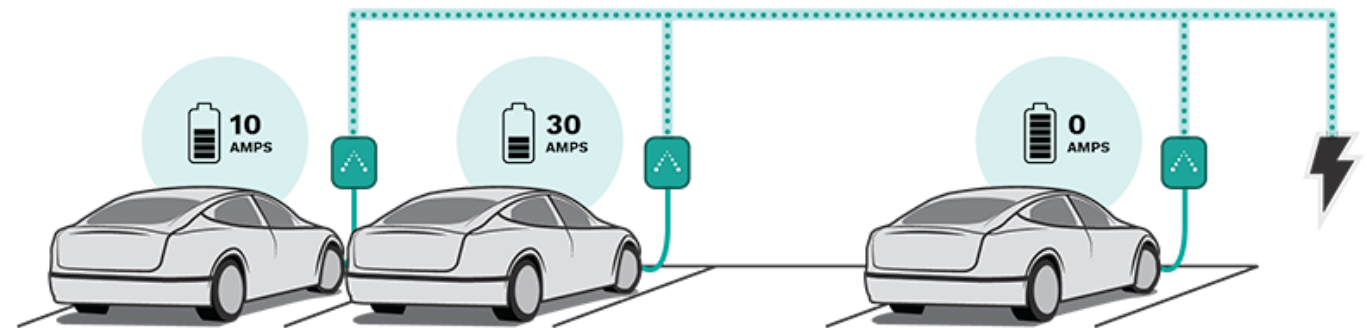


### New Multifamily & Hotels

- 4%-installed and 20% EV-capable parking spaces shall provide accommodates for future EV charging (ALMS)
- For EV-capable, reserve electrical service panel space for future circuit breakers labeled “Future EV Charging”
- Install raceway from the electrical service panel to parking area, with junction box or outlet labeled “Future EV Charging”.



FreePik

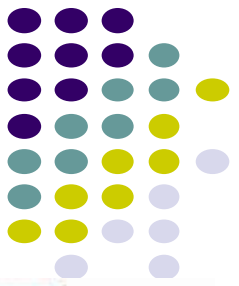


Source: EverCharge SmartPower

## 6

# Electric Vehicle Capable Charging

## 2021 IgCC Section 501.3.7.3

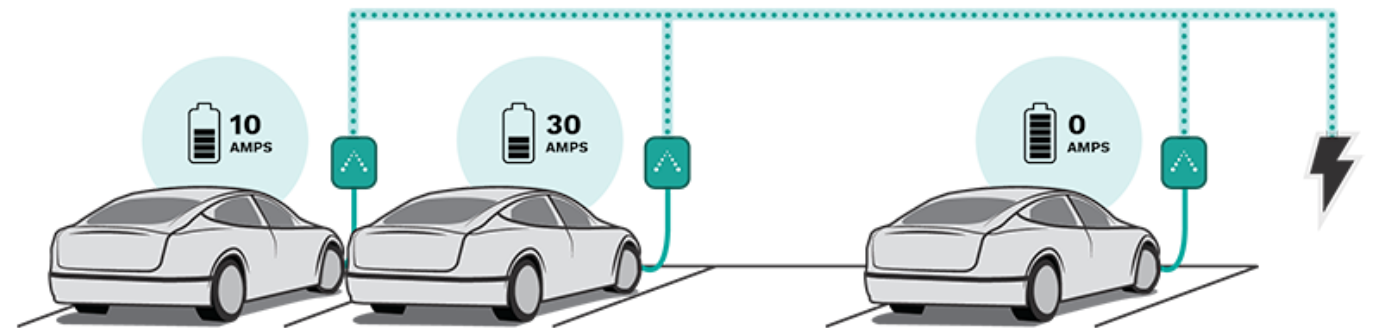


### ● New Commercial Buildings

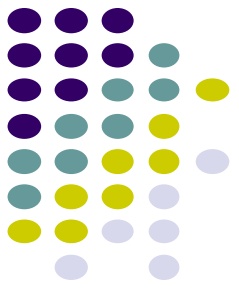
- 4%-installed and 10% EV-capable parking spaces shall provide accommodates for future EV charging (ALMS)
- For EV-capable, reserve electrical service panel space for future circuit breakers labeled “Future EV Charging”
- Install raceway from the electrical service panel to parking area, with junction box or outlet labeled “Future EV Charging”.



Vecteezy



Source: EverCharge SmartPower



7

# IgCC and Building Waste Multifamily and Commercial

## Construction Waste Management

- Divert not less than 50% of construction waste from landfill for recycling and reuse
- Metal, wood, cardboard, foam, concrete, masonry, asphalt
- Recyclable materials can be co-mingled and sorted off-site at Material Recovery Facility (MRF)



# Plan Review Correction Stamp

## CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT

Add note: “A minimum of 50% of nonhazardous construction, demolition, or deconstruction waste material shall be diverted from disposal in landfills and incinerators through reuse, recycling, repurposing, and/or composting. Such materials include paper, cardboard, concrete, masonry, wood, and metal. All diversion calculations shall be based on weight throughout the construction process (IgCC 901.3.1.1).”

"The following Construction and Demolition Waste Management Plan form must be submitted prior to permit issuance –

<https://www.scottsdaleaz.gov/Assets/ScottsdaleAZ/Design/green-building/2021+IgCC+Construction+Demolition+Waste+Management+Plan.pdf> “



# Construction and Demolition Waste Management Plan - 2021 IgCC

 Plan Review # 6374-23

Permit No # \_\_\_\_\_

### Building Project Information

 Project Name: Berkley Insurance TI Date: 10/27/2023

 Project Address: 7233 E Butherus Dr, Scottsdale, AZ 85260

 Contractor: Clune Construction Company Phone: 480-901-2969

 Owner: Berkley Insurance Company Phone: \_\_\_\_\_

### When Required

**Construction and Demolition (C&D) Waste Management:** Complete this form for all new construction, demolition or deconstruction for buildings with a total floor area of 5,000 sq. ft. or more (IgCC amended Sec. 901.3.1.1). **Review:** This form must be submitted and approved before permit(s) are issued.

### Materials to be Recycled

At least 50% of all construction debris must be diverted from the landfill by either **source-separating** the waste by material type or by mixing the materials in a mixed C&D material container. Mixed C&D materials are required to be processed at a mixed C&D sorting facility. See Definitions on next page for more information.

Recycled and salvaged materials include but not limited to metal, wood, cardboard, paper, plastic, masonry, tile, concrete, and asphalt.

**50%**  
of all construction  
debris must be  
diverted from the  
landfill

### Material Management

 How will the C&D debris be collected on project site:  Source-Separated  Mixed C&D

Materials to be collected & hauled	Facilities to receive materials for reuse
Ceiling tiles and grid	Northwest Regional 19401 W Deer Valley Rd, Surprise, AZ
metal track, studs and screws	Liberty Metals 4708 W Pasadena Ave, Phoenix, AZ
Millwork - 1 dimensional lumber	Grow Well 2807 S 27th Ave, Phoenix, AZ

### Planning and Development Services

7447 E Indian School Road, Suite 125, Scottsdale, AZ 85251 • Phone: 480-312-7080

### Construction Waste Management (continued)

Materials to be collected & hauled	Facilities to receive materials for reuse
Electrical piping	Liberty Metals 4708 W Pasadena Ave, Phoenix, AZ
Aluminum Framing	Liberty Metals 4708 W Pasadena Ave, Phoenix, AZ
Carpet and Tile	Northwest Regional 19401 W Deer Valley Rd, Surprise, AZ
Glass	Sky harbor transfer - for recycling at Northwest Regional 19401 W Deer Valley Rd, Surprise, AZ

### Definitions

**Self-haul:** Permit holder, general contractor, or a subcontractor that hauls their own waste material for recycling, reuse, salvaging or disposal at recycling/waste facilities.

**Hauler:** A company that collects, hauls and tracks mixed C&D materials for diversion from landfill.

**Source separation:** Collection of wood, metal, cardboard, and other recyclables in separate containers.

**Mixed C&D material:** Collection of all recyclable material in same container. Mixed material is required to be sent to a mixed C&D sorting facility to have the recyclable materials extracted and recovered. This option will save the most space on tight construction sites.

**Mixed C&D sorting facility:** Specialized facilities that extract recyclable materials from mixed C&D debris. All mixed C&D material must go to a mixed C&D sorting facility.

### Terms and Conditions

1. This C & D Waste Management Plan must be kept on the job site in the permit folder for the duration of the project. City of Scottsdale staff may enter the jobsite to inspect waste and recycled collection areas.
2. Salvaged materials, recyclables, and waste shall be tracked and documented by means of receipts from the waste management subcontractor. Percentages of all salvaged, recycled and waste materials shall be calculated, demonstrating amounts based on weight and entered into the waste diversion log, including information from any subcontractors who self-hauled their own debris off-site.
3. Documentation shall be maintained through the course of construction. Where requested by code official, evidence of diversion shall be provided.
4. Construction and demolition debris shall not be burned or dumped illegally.
5. Waste diversion rates shall be available prior to framing and final building inspections with  $\geq 50\%$  average diversion rate.

Applicant's Signature: Anthony Semenza Digitally signed by Anthony Semenza  
DN: cn=Anthony Semenza, o=Clune Construction, ou=Clune Construction, email=Anthony.Semenza@cluneco.com, c=US Date: 11/2/23

Applicant (print): Tony Semenza Company Clune Construction

### Planning and Development Services

7447 E Indian School Road, Suite 125, Scottsdale, AZ 85251 • Phone: 480-312-7080





City of Scottsdale  
Green Building Program  
**CONSTRUCTION AND DEMOLITION WASTE  
REUSE AND RECYCLING**  
*rev. March 1, 2024*

Construction and demolition waste constitutes about 40 percent of the total solid waste stream in the United States. Besides source reduction, building and material reuse is the most effective strategy for reducing the environmental impacts of the waste stream. Reusing existing materials reduce the environmental burden of the manufacturing process. Replacing existing materials with new ones broadens environmental impacts associated with natural resource extraction, production, and transportation.

In most urban areas, landfill space is reaching capacity, requiring the conversion of more land elsewhere and raising the transportation costs of waste. Innovations in recycling technology improve sorting and processing to supply raw material to secondary markets, keeping those materials in the production stream for an extended period.

#### **Material Reuse**

By reusing materials on-site, donating, or selling salvageable items, you can cut waste costs and reduce material expenses. Determine the savings and cost of reusing, donating, and/or selling salvageable materials. The following are just a few of the materials that can be salvaged and/or donated locally:

Appliances, block, bricks, carpeting, doors, flooring, lighting fixtures, metal framing, pipes, shelving, tile, windows, bathroom fixtures, cabinets, dimensional lumber, ductwork, insulation, marble, paneling, OSB & plywood, siding, trim, wood beams.

#### **Construction Site Recycling**

Recommended steps for an effective construction site recycling program:

- Include requirements for on-site recycling in all project documents and subcontracts.
- Decide what materials will be recycled on the project and determine which wastes subcontractors will be responsible for recycling.
- Clearly designate the recycling bins.
- Place garbage and recycling bins near each other, and close to the point of waste generation but out of the traffic pattern.
- Periodically check bins for contamination and check the wastes in the garbage dumpsters to see if recyclables are being thrown away.

#### **Local Recycling and Reuse Facilities**

##### Metal and steel

- Copper State Metals
- Davis Metals and Salvage
- Hendrix Salvage
- Liberty Iron and Metal
- Southwest Metals
- American Metals
- DeReel Tech Scrap Metal Processing

##### Concrete, asphalt, masonry

- Johnson-Stewart
- Contractors Landfill & Recycling

##### Cardboard, wood, metal, and multiple materials

- Waste Management
- Weinberger Waste Disposal
- Republic Services
- Friedman Recycling
- Sierra Waste Systems
- SA Recycling

##### High density polyethylene (HDPE), low density polyethylene (LDPE), polyethylene, polystyrene (PS), terephthalate (PET)

- Friedman Recycling

##### Wood and millwork

- AZ Wood Grinding and Recycling
- Gro-Well

##### Ceiling tiles, millwork, doors, windows, misc.

- Stardust Building Supply
- Armstrong ceiling recycling program

##### Carpeting

- Aquafil Carpet Recycling

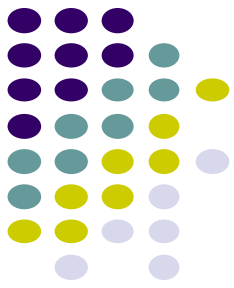
Please note that Tenant Improvement projects often reuse existing materials including doors, interior partitions, suspended ceiling, light fixtures, and mechanical duct work.

8

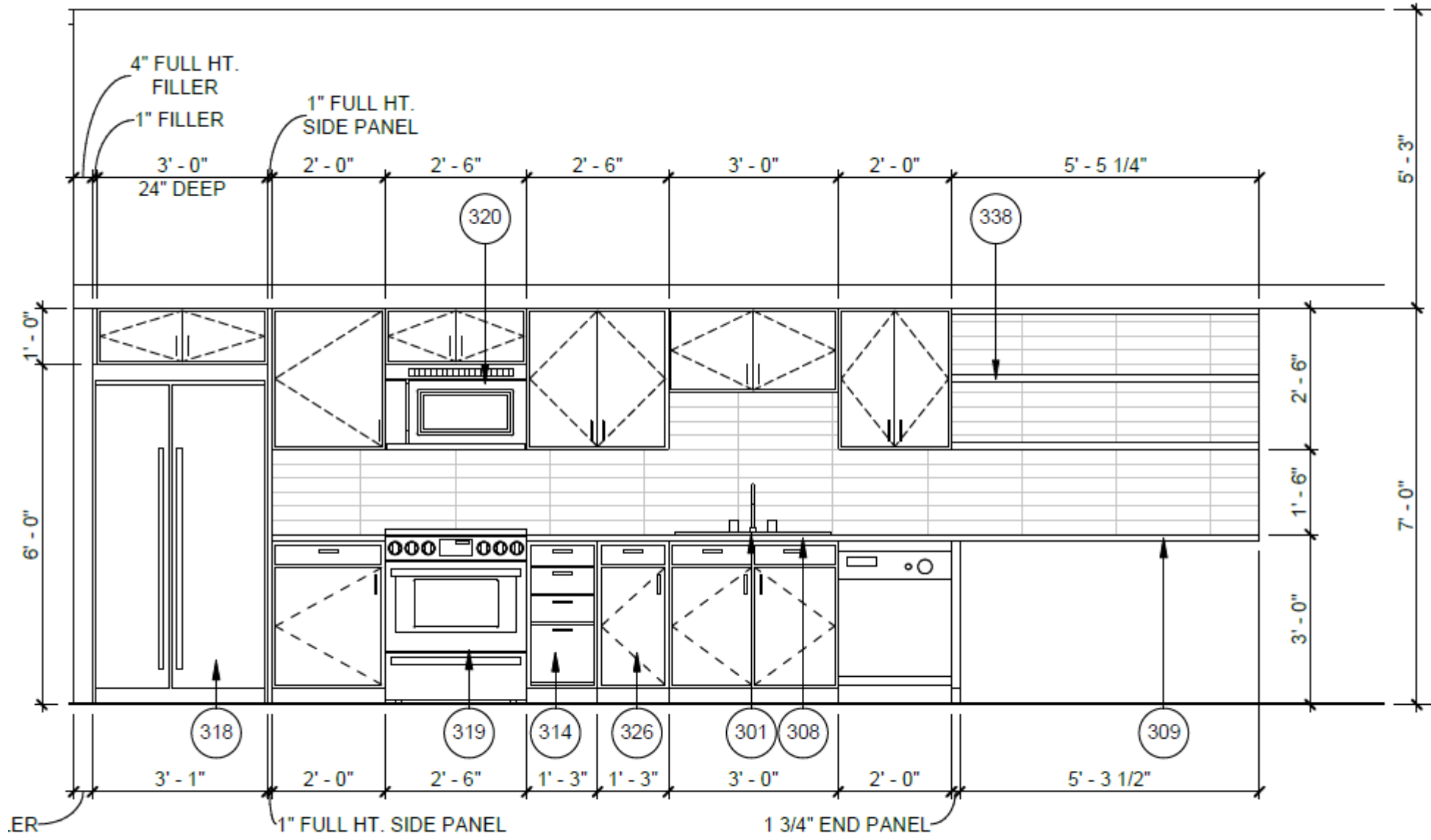
## IgCC/IBC Recycling Multifamily (Apts and Condos)

### Recycling Facilities

- Provide recycling/trash pull-out collection bins in kitchen cabinet of multi-family buildings
- Provide recycling and trash chutes in multifamily buildings (> 3 stories) or provide recycling collection area on each floor



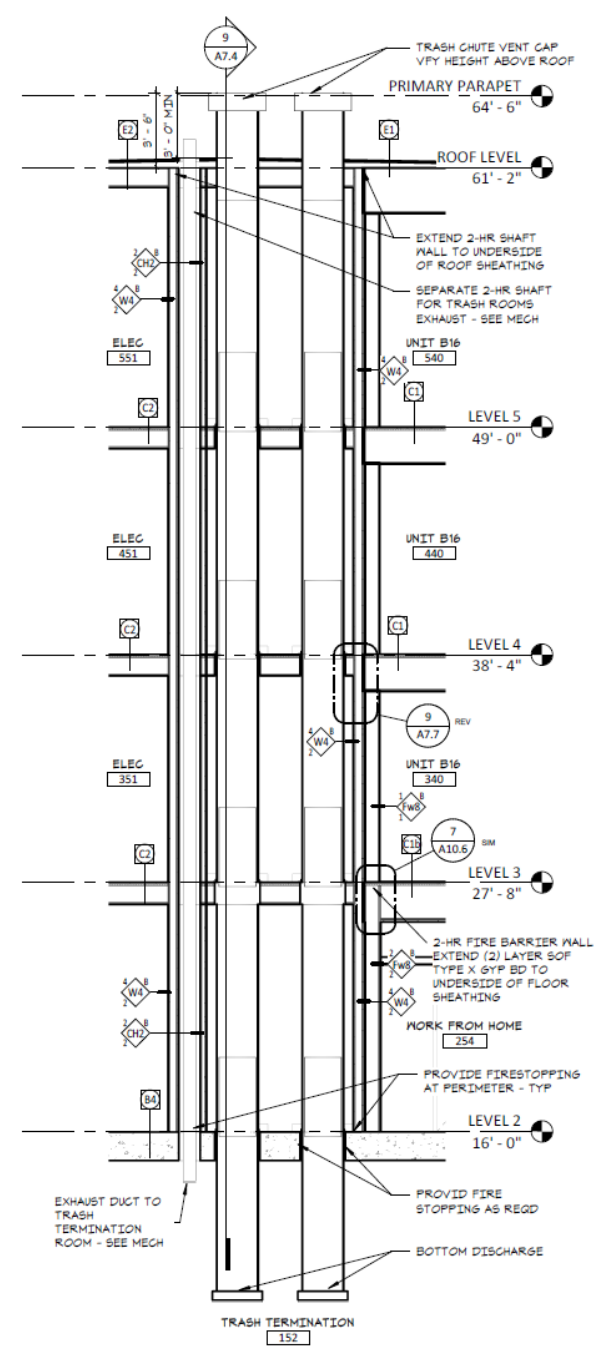
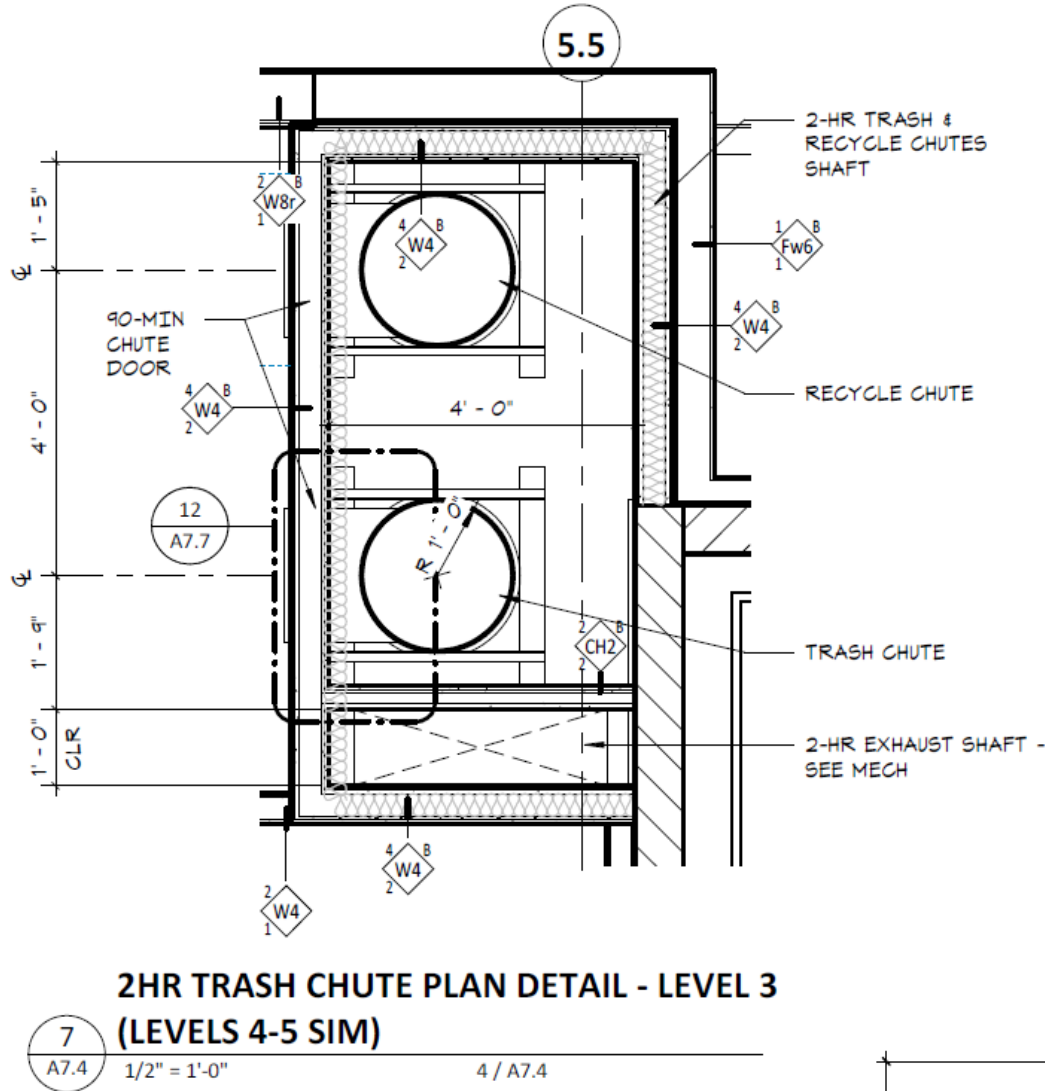
# Interior Elevation - Example



**3** KITCHEN - ELEVATION 1  
3/8" = 1'-0"

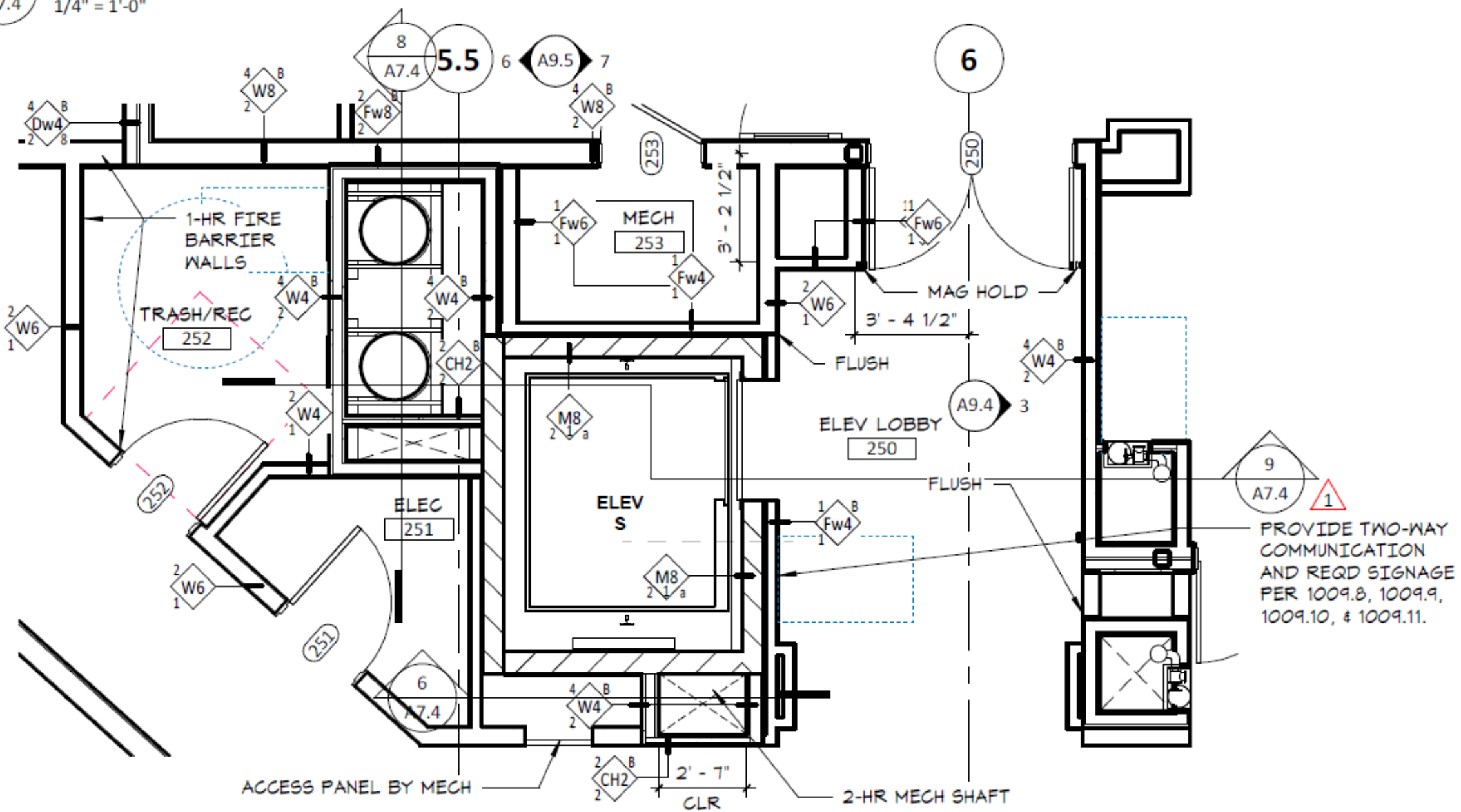
326	TWO (2) PULL-OUT BINS, MIN. 7-GALLON EACH, FOR RECYCLING AND TRASH IN BASE CABINET
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# Trash/Recycling Chute Detail - Examples





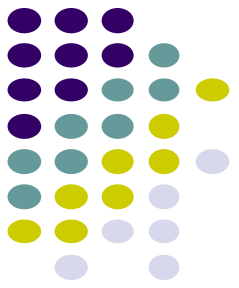
# Trash/Recycling Chute Detail - Examples



3  
A7.4 1/4" = 1'-0"  
**ELEVATOR SOUTH - LEVEL 2 PLAN**

# 8

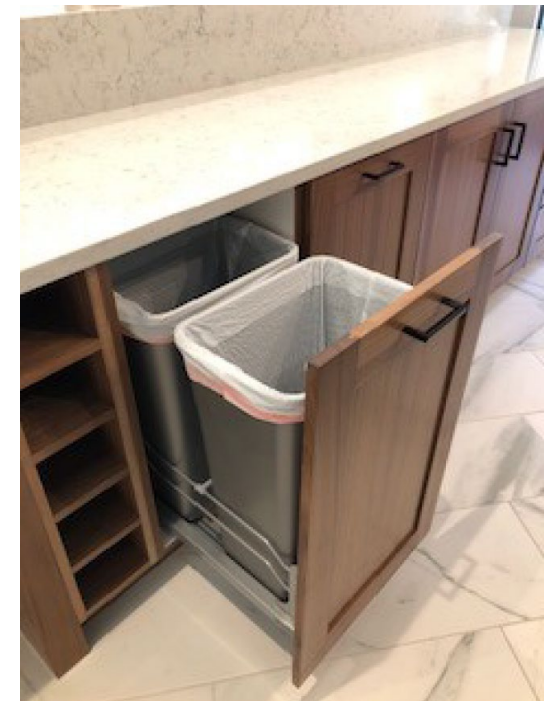
## IgCC/IBC Recycling Commercial (common areas)



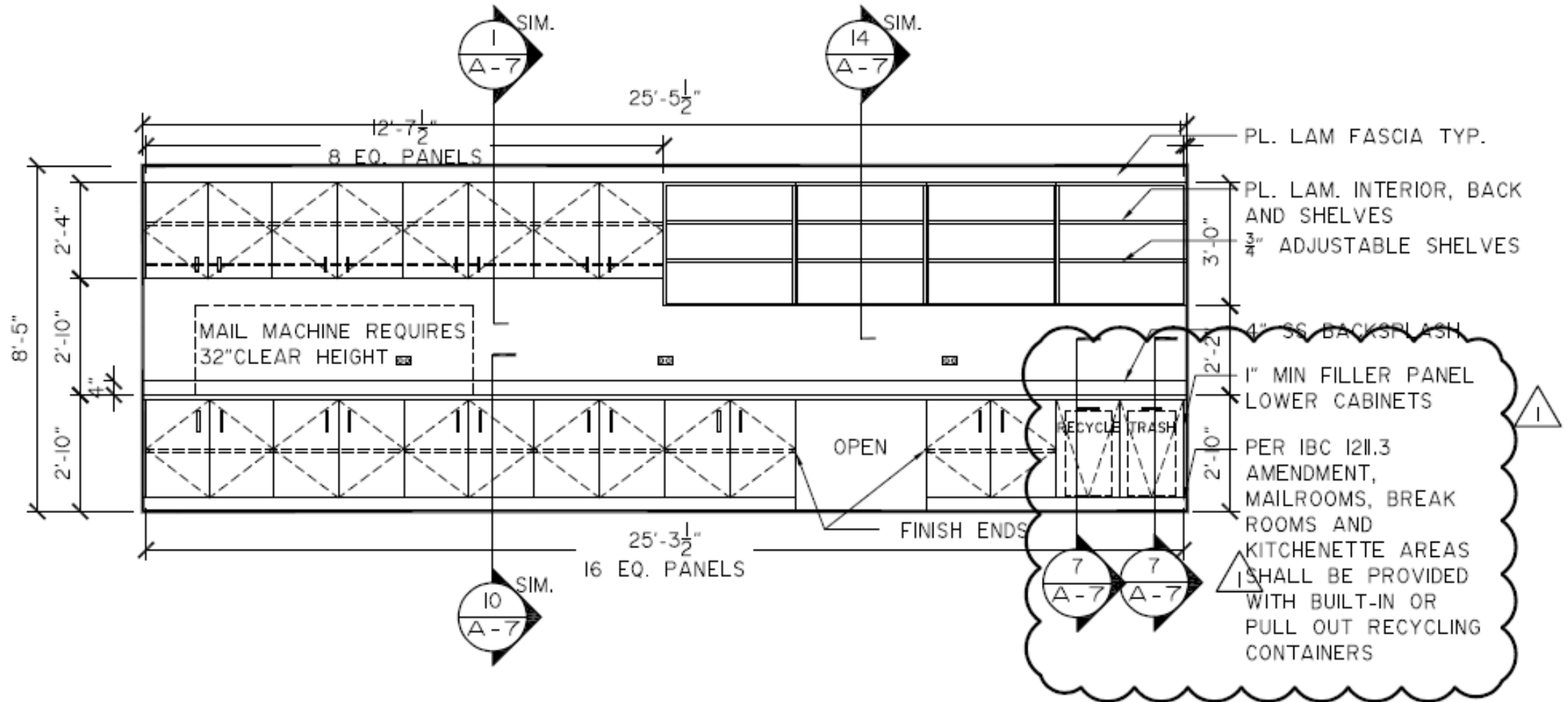
### Recycling Facilities

- Common kitchen areas in multi-family buildings (i.e. – club house)
- Provide recycling collection in mailrooms and breakrooms (i.e. – offices)

**IgCC 901.3.4.1 Recyclables.** Mailrooms, break rooms, and kitchen/kitchenette areas shall be provided with built-in or pull-out trash/recycling containers.

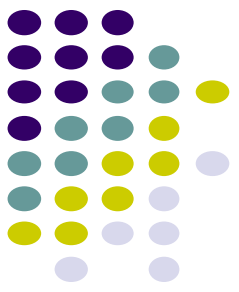


# Interior Elevation - Example



**8 MAILROOM 1007 ELEVATION**  
SCALE: 1/4" = 1'-0"





# 9 IgCC Reduced Impact Materials Commercial and Multifamily

Comply with any two reduced impact materials

**a) Recycled content materials**

- Not less than 10% of materials (based on cost)

**b) Regional materials**

- Not less than 15% (based on cost)

**c) Biobased and wood components**

- Not less than 5% (based on cost)

**d) Environmental product declarations**

- Not less than 3 building products – TI's



Metal



Masonry

# IgCC Reduced Impact Materials



Core and Shell building

Butler Design Group

# Environmental Product Declaration (EPD)

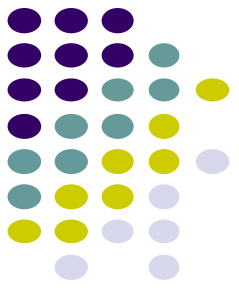
- EPDs are similar to Material Safety Data Sheets (MSDS) or ICC ES
- Common materials and products
  - Ready mixed concrete
  - Metal framing
  - Drywall
  - Flooring and wall bases
  - Acoustical ceiling tiles
- Industry-wide and product-specific



[EPDs | Armstrong Ceiling Solutions – Commercial](#)

10

# IgCC Indoor Environmental Quality Multifamily and Commercial



## Low VOC Finishes

- At least 85% of interior finishes to be low-VOC (volatile organic compound)
  - Adhesives & sealants
  - Paints & coatings
  - Floor coverings
  - Acoustical ceiling tiles



# Plan Review Correction Stamp

## IgCC LOW-VOC FINISH MATERIALS

Newly installed interior wall, ceiling, and floor finish materials, including new carpeting and ceiling tiles shall comply with low-VOC limits of Scottsdale amended Section 801.4.2 of the *International Green Construction Code (IgCC)*.

801.4.2.1 Adhesives and sealants.

801.4.2.2 Paints and coatings.

801.4.2.3 Floor covering materials.

801.4.2.4 Composite woods, agrifiber and laminated products.

801.4.2.6 Ceiling tile and wall systems (excluding office furniture systems).

Floor covering materials, ceiling tiles, and wall system products certified under nationally recognized third-party low-emission certification programs such as Carpet and Rug Institute Green Label Plus, Resilient Floor Covering Institute FloorScore and UL GreenGuard, are deemed to comply with IgCC emission limits.

**IgCC TABLE 801.4.2.2  
VOC CONTENT LIMITS FOR PAINTS AND COATINGS**

<b>CATEGORY</b>	<b>VOC LIMIT grams per liter (g/L) <sup>a,b</sup></b>
Flat paints	50
Nonflat paints	50
Nonflat High-gloss paints	150
Specialty coatings:	
Concrete/masonry sealers	100
Floor coatings	50
Primers, sealers, and undercoats	100
Stains	250
Wood coatings	275

# Plan Review Correction Stamps

**IgCC TABLE 801.4.2.1  
VOC CONTENT LIMITS FOR ADHESIVES AND SEALANTS**

<b>ADHESIVES</b>	<b>VOC LIMIT grams per liter (g/L) <sup>a,b</sup></b>
Building envelope membrane adhesive	250
Carpet and carpet pad adhesives	50
Ceramic tile adhesives	65
Cove base adhesives	50
Drywall and panel adhesives	50
Multipurpose construction adhesives	70
Rubber floor adhesive	60
Structural glazing adhesives	100
Subfloor Adhesive	50
VCT and asphalt tile adhesives	50
Wood flooring adhesives	100
<b>SEALANTS</b>	
Architectural sealants including foam and grout	250

## MANUFACTURER REPRESENTATIVE CONTACT INFORMATION

MANUFACTURER	NAME	CONTACT INFORMATION
AHF (ARMSTRONG FLOORING)	SUSAN TOFT	MOBILE: 760.801.2122, EMAIL: STOFT@TRIWESTLTD.COM
ARMSTRONG CBLINGS	DAI-NEE TAN	MOBILE: 949.275.8169, EMAIL: DTAN@ARMSTRONG.COM
ARTE	SHARLENE MURTAGH	MOBILE: 858.449.4546, EMAIL: SMURTAGH@KOROSEAL.COM
CAESARSTONE	TODD CARPENTER	MOBILE: 818.277.3009, EMAIL: TODD.CARPENTER@CAESARSTONEUS.COM
CERTAINTEED	THOMAS OECHEL	MOBILE: 415.516.4235, EMAIL: THOMAS@GGRANTASSOCIATES.COM
FRASCH	THOMAS OECHEL	MOBILE: 415.516.4235, EMAIL: THOMAS@GGRANTASSOCIATES.COM
GARDEN STATE TILE	MIKE HUBERT	MOBILE: 407.982.0430, EMAIL: MHUBERT@GSTILE.COM
MAPEI	BRIAN CARLSON	MOBILE: 949.527.1564, EMAIL: BCARLSON@MAPEI.COM
MDC INTERIOR SOLUTIONS	SUZI HERRMANN	MOBILE: 909.737.7010, EMAIL: SHERRMANN@MDCWALL.COM
MECHO SHADES	CARLOS HERRERA	MOBILE: 626.221.0944, EMAIL: CARLOS.HERRERA@MECHOSHADE.COM
PATCRAFT	JERRY CORDOVA	MOBILE: 619.569.5846, EMAIL: JERRYCORDOVA@PATCRAFT.COM
SCHLUTER SYSTEMS	MARY YOCUM	MOBILE: 714.329.0355, EMAIL: MYOCUM@SCHLUTER.COM
SHAW	CATHY MILLER	MOBILE: 760.815.7371, EMAIL: CATHY.MILLER@SHAWCONTRACT.COM
SHERWIN WILLIAMS	JOHN DUMESNIL	MOBILE: 858.496.8929, EMAIL: JOHN.T.DUMESNIL@SHERWIN.COM
TARKETT	CARMELA LURIE	MOBILE: 619.985.9319, EMAIL: CARMELA.LURIE@TARKETT.COM
TRESPA	TROY WITTENBACH	TELEPHONE: 830.388.2733, EMAIL: T.WITTENBACH@TRESPA.COM
TURF	SHERYL GAYESKI	MOBILE: 630.258.4848, EMAIL: SGAYESKI@LEVELLINES.COM
WESINCO	RYAN LASARSKY	MOBILE: 918.633.7755, EMAIL: RLASARSKY@WESINCO.COM
WESTCOAT	MARC DI ZINNO	MOBILE: 619.255.7187, EMAIL: MARC.DIZINNO@WESTCOAT.COM
WILSONART	EILEEN CAPELLE	MOBILE: 323.559.3070, EMAIL: ECAPELLE@EBBRADLEY.COM
WOLF GORDON	KRISTA MCBRIDE	MOBILE: 310.5956784, EMAIL: KRISTA.MCBRIDE@WOLFGORDON.COM

## GENERAL NOTES

- SEE FINISH PLANS FOR PATTERNS, ACCENT TILE LOCATIONS, THRESHOLDS, TRANSITIONS, CARPET PATTERNS, & CARPET DIRECTION.
- AT AREAS SCHEDULED TO RECEIVE NEW FINISHES ADJACENT TO EXISTING FINISHES, BLEND MATERIALS TO CREATE A SEAMLESS INTERFACE BETWEEN THE NEW & EXISTING FINISHES.
- "EX" SHOWN IN FINISH SCHEDULE MEANS: "EXISTING FINISH TO REMAIN, NO CHANGE UNLESS NOTED OTHERWISE" - SEE REMARKS.
- SEE A930 FOR TYPICAL FINISH DETAILS.
- WALL AND CEILING MATERIALS SHALL NOT EXCEED THE FLAME SPREAD CLASSIFICATIONS IN IBC TABLE 803.13. FINISHES SHALL BE CLASS 'C' MINIMUM.
- INTERIOR FLOOR FINISH & COVERINGS SHALL COMPLY WITH IBC SECTION 804.

## FINISH SCHEDULE & LEGEND REMARKS

- EXISTING FINISHES TO REMAIN IN ENTIRE ROOM. PATCH AS REQUIRED FOR NEW CONSTRUCTION TO ADJACENT SPACES AND MATCH EXISTING.
- SEE FINISH FLOOR PLANS FOR FLOORING PATTERN AND DIRECTION.
- SEE FINISH FLOOR PLANS FOR SPECIALTY WALL FINISH LOCATION.
- NOT USED.
- SEE REFLECTED CEILING PLANS FOR CEILING PANEL PATTERN & ADDITIONAL SOFFIT INFORMATION.
- SEE INTERIOR ELEVATIONS FOR CASEWORK LAYOUT AND ADDITIONAL INFORMATION REGARDING CASEWORK FINISHES AND DETAILS.
- SEE FINISH FLOOR PLANS AND INTERIOR ELEVATIONS FOR WALL TILE LOCATION AND PATTERN.
- PROVIDE ANODIZED ALUMINUM TRIM PIECES PER FINISH LEGEND.
- PAINT ALL CEILING SURFACES EXPOSED TO VIEW INCLUDING BUILDING STRUCTURE, HVAC DUCTS, PIPING, CONDUIT, ETC. AS INDICATED ON THE FINISH SCHEDULE - DO NOT PAINT LIGHT FIXTURES, UNO.
- PROVIDE CONTINUOUS BASE AROUND ALL PERMANENT FIXED CASEWORK AND IN KNEE SPACES.

## IGCC NOTES

NEWLY INSTALLED INTERIOR WALL, CEILING, AND FLOOR FINISH MATERIALS, INCLUDING NEW CARPETING AND CEILING TILES SHALL COMPLY WITH LOW-VOC LIMITS OF SCOTTSDALE AMENDED SECTION 801.4.2 OF THE INTERNATIONAL GREEN CONSTRUCTION CODE (IGCC).

801.4.2.1 ADHESIVES AND SEALANTS.

801.4.2.2 PAINTS AND COATINGS.

801.4.2.3 FLOOR COVERING MATERIALS.

801.4.2.4 COMPOSITE WOODS, AGRIFIBER AND LAMINATED PRODUCTS.

801.4.2.6 CEILING TILE AND WALL SYSTEMS (EXCLUDING OFFICE FURNITURE SYSTEMS).

FLOOR COVERING MATERIALS, CEILING TILES, AND WALL SYSTEM PRODUCTS CERTIFIED UNDER NATIONALLY RECOGNIZED THIRD-PARTY LOW-EMISSION CERTIFICATION PROGRAMS SUCH AS CARPET AND RUG INSTITUTE, GREEN LABEL PLUS, RESILIENT FLOOR COVERING INSTITUTE, FLOORSCORE, AND UL GREENGUARD, ARE DEEMED TO COMPLY WITH IGCC EMISSION LIMITS.

### VOC CONTENT LIMITS FOR ADHESIVES AND SEALANTS - TABLE 801.4.2.1

ADHESIVES	VOC LIMIT GRAMS PER LITER (g/L)
BUILDING ENVELOPE MEMBRANE ADHESIVE	250
CARPET AND CARPET PAD ADHESIVES	50
CERAMIC TILE ADHESIVES	85
COVE BASE ADHESIVES	50
DRY WALL AND PANEL ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVES	70
RUBBER FLOOR ADHESIVE	60
STRUCTURAL GLAZING ADHESIVES	100
SUBFLOOR ADHESIVE	50
VCT AND ASPHALT TILE ADHESIVES	50
WOOD FLOORING ADHESIVES	100
<b>SEALANTS</b>	
ARCHITECTURAL SEALANTS INCLUDING FOAM AND GROUT	250

### VOC CONTENT LIMITS FOR PAINTS AND COATINGS - TABLE 801.4.2.2

CATEGORY	VOC LIMIT GRAMS PER LITER (g/L)
FLAT PAINTS	50
NONFLAT PAINTS	50
NONFLAT HIGH-GLOSS PAINTS	150
<b>SPECIALTY COATINGS</b>	
CONCRETE / MASONRY SEALERS	100
FLOOR COATINGS	50
PRIMERS, SEALERS, AND UNDERCOATS	100
STAINS	250
WOOD COATINGS	275





## FINISH SCHEDULE

MARK	PRODUCT TYPE	MANUFACTURER	STYLE/PATTERN/MODEL#	COLOR/FINISH#	VOC g/L	SPECIFICATIONS	LOCATION/NOTES
<b>[ACT] ACOUSTIC CEILING TILE</b>							
ACT-01	ACOUSTIC CEILING TILE SYSTEM	ARMSTRONG	24" X 48" CLEAN ROOM VL 670	WHITE	GREENGUARD GOLD	3/8" THICKNESS, LAY-IN 12/16"	KITCHEN CEILING
<b>[DH] DECORATIVE HARDWARE</b>							
DH-01	6" DRAWER PULL HANDLE	RENOVATION	6" LARGE DRAWER EDGE PULL	OIL-RUBBED BRONZE			HILLWORK DRAWER / CABINET PULLS
<b>[DR] DRAPERY</b>							
DR-01	DRAPERY	COVINGTON CONTRACT	ALLURE	BRONZE, RAILROADED		V-0.200 H-0.200" FLAME RATING NFPA 701	CHAMPAGNE ROOM RECESSED DRAPERY ROD ABOVE BASED ON SAMPSON HILLS F16 (OR EQUAL)
<b>[FA] FABRIC</b>							
FA-01	FABRIC	MAYER FABRICS	REFUGE	CACTUS 620-003		-	BANQUETTE SEAT BACK
FA-02	FABRIC	PIL DOUX TEXTILES	HILL	GRASS		-	BANQUETTE SEAT
FA-03	FABRIC	CONCERTEX	PEBBLED	PLASTER		PRO-TECH STAIN PROTECTION	ENTRY BENCH SEAT
<b>[FR] FIBER REINFORCED PLASTIC</b>							
FRP-01	FIBER REINFORCED PLASTIC	MARLITE	SMOOTH S 100 S/S	WHITE	GREENGUARD	SMOOTH	KITCHEN AND PREP AREA WALLS AS INDICATED U.N.O.
<b>[FTL] FLOOR TILE</b>							
FTL-01	2" X 2" MOSAIC FLOOR TILE	DACTILE	30% OAK MOSS, 67% MOONSHINE - IN STANDARD DAL TILE PATTERN DP0023	OAK MOSS (1) D196 / MOONSHINE (2) D217		MOSAIC TILE GR: GR-05	TASTING BAR FLOORING
FTL-02	FLOOR TILE	WOW	ASSET STONE COLLECTION TIMELESS	SEA, MATTÉ		TWO SIZES: 4.3" x 4.3" AND 4.3" x 8.6". INSTALL PATTERN: SEE FINISH PLAN GR: GR-02	RESERVE ROOM FLOOR
<b>[GL] GLASS</b>							
GL-01	DECORATIVE MIRRORRED GLASS PANELS	MIRROR UNIQUE	NOODMO GOLD	MIRRORRED			CHAMPAGNE ROOM CEILING
GL-02	RIBBED GLASS PANELS	WRIGHT BROTHERS GLASSWORKS	TIGHT REED	CLEAR		PATTERN IN VERTICAL ORIENTATION, RIBBED SIDE NOT TO BE EXPOSED	BETWEEN TASTING BAR AND CHAMPAGNE ROOM
GL-03	GLASS PANELS	ARCADIA	LOW-E TEmPERED GLASS	CLEAR			
GL-04	DECORATIVE MIRRORRED GLASS PANELS	MIRROR UNIQUE	NOODMO ANTIQUE HEAVY DISTRESSED	MIRRORRED			WALL BEHIND BAR AND BACK OF RESERVE ROOM HILLWORK
<b>[GR] GROUT</b>							
GR-01	EPOXY GROUT	CUSTOM BUILDING PRODUCTS	CEG-LITE SOLIDS EPOXY GROUT	#60 CHARCOAL	UNDER 50	-	CHAMPAGNE ROOM BACKSLASH
GR-02	EPOXY GROUT	CUSTOM BUILDING PRODUCTS	CEG-LITE SOLIDS EPOXY GROUT	#160 CHATEAU	UNDER 50	3/16" THICK AT WTL-02 / LESS THAN 1/8" @ RESERVE ROOM FLOOR	FOOD PREP WALL TILE, RESERVE ROOM FLOOR
GR-03	EPOXY GROUT	CUSTOM BUILDING PRODUCTS	CEG-LITE SOLIDS EPOXY GROUT	#64 SHADOW	UNDER 50	LESS THAN 1/8" THICK	BATHROOM WALL TILE
GR-04	EPOXY GROUT	CUSTOM BUILDING PRODUCTS	CEG-LITE SOLIDS EPOXY GROUT	#643 WARM GRAY	UNDER 50	3MM THICK	BAR FRONT TILE
GR-05	EPOXY GROUT	CUSTOM BUILDING PRODUCTS	CEG-LITE SOLIDS EPOXY GROUT	#545 BLEACHED WOOD	UNDER 50	LESS THAN 1/8" THICK	BAR TILE FLOOR TILE
GR-06	EPOXY GROUT	CUSTOM BUILDING PRODUCTS	CEG-LITE SOLIDS EPOXY GROUT	TO MATCH MAPLE 112 - PECAN	UNDER 50	LESS THAN 1/8" THICK	PREP AREA / KITCHEN FLOORING
<b>[GYP] GYPSUM</b>							
GYP-01	GYPSUM BOARD CEILING	-	-	SEE RCP FOR COLOR, FINISH TO BE FLAT	GREENGUARD GOLD	-	HAROLD CEILING, TYPICAL UMO
<b>[MT] METAL</b>							
MT-01	BAR COUNTERTOP	LAMASTELLE	MEDIUM NATURAL MEDIUM TEXTURE	ZINC W/ LAQUER FINISH			
<b>[MTB] METAL BASE</b>							
MTB-01	METAL BASE	-	1/2" THICK 4" HIGH BLACKENED STEEL FLAT STOCK	BLACKENED		PROTECTANT SEAL	WINE DISPLAY AND RETAIL HILLWORK BASE
MTB-02	METAL BASE	WEST COAST INDUSTRIES	SATIN BRASS - MSB	PLATED			MATCH PRODUCT SPECIFIED, GC TO PROVIDE SAMPLE FOR APPROVAL PRIOR TO FABRICATION
<b>[PT] PAINT</b>							
PT-01	INTERIOR PAINT	BENJAMIN MOORE	FIELD PAINT	CHANTILLY LACE OC-65	0 - ECO SPEC	EGGSHELL FINISH	FIELD PAINT THROUGHOUT, SEE INTERIOR ELEVATIONS



**Tenant Improvement (TI)  
Green Code Plan Review Checklist**  
2021 International Green Construction Code (IgCC)  
rev. 3/15/24



Project Name \_\_\_\_\_ Date \_\_\_\_\_

Project Address \_\_\_\_\_

Submitted By \_\_\_\_\_ Phone Number \_\_\_\_\_

**Water Use Efficiency Compliance (IgCC)**

- Comply with amended IgCC 601.3.2 for new fixtures, fittings, appliances, and equipment:
  - Plumbing fixtures and fittings (601.3.2.1)
  - Appliances (601.3.2.2)
  - HVAC systems and equipment (601.3.2.3)
  - Commercial food service equipment (601.3.2.5)
  - Water softeners (601.3.6) and/or reverse osmosis systems (601.3.7) where installed

**Energy Efficiency Compliance (IECC)**

- Comply with energy code (IECC).

**Indoor Environmental Quality Compliance (IgCC)**

- Comply with the VOC limits of amended IgCC Section 801.4.2 for newly installed materials:
  - Adhesives and sealants (801.4.2.1)
  - Paints and coatings (801.4.2.2)
  - Floor covering materials (801.4.2.3)
  - Composite wood products, agrifiber, hardwood plywood and laminated products (801.4.2.4)
  - Acoustical ceiling tiles and wall systems (801.4.2.6)

**Materials and Resources Compliance (IgCC)**

- Comply with amended IgCC 901.3 for new and waste materials:
  - Divert a minimum of 50% of nonhazardous construction, demolition or deconstruction waste material from disposal in landfills or incinerators through reuse, recycling, repurposing and/or composting (901.3.1.1)
    - Exception: Building projects less than 5,000 sq. ft. of new, added, or remodeled area.
  - Reduced impact material options (select two) (901.4.1)
    - Minimum 10% recycled content and salvaged material content (901.4.1.1)
    - Minimum 15% regional materials (901.4.1.2)
    - Minimum 5% biobased products (901.4.1.3)
    - Minimum 3 environmental product declarations or certifications (901.4.1.4)

Scottsdale's Commercial Green Construction Code link –  
<https://www.scottsdaleaz.gov/green-building-program/green-codes>

**Tenant Improvement Checklist**

**City of Scottsdale  
2021 International Green Construction Code (IgCC)  
Building Plan Review Checklist – Commercial Building Projects**  
rev. 4/20/23



Use this checklist for tracking compliance requirements with Scottsdale's amended International Green Construction Code (IgCC). On-line resources are available including amendments and helpful worksheets for Heat Island Mitigation (Sec. 501.3.5) at <https://www.scottsdaleaz.gov/green-building-program/green-codes>. The full text of the unamended IgCC code book is available for viewing and/or purchase at [2021 International Green Construction Code \(IgCC\) | ICC Digital Codes \(iccsafe.org\)](https://www.iccsafe.org)

Project Name: \_\_\_\_\_ Date: \_\_\_\_\_ Plan Review # \_\_\_\_\_

CHAPTER 5 – SITE SUSTAINABILITY		Verification	
√	501.3.5 Mitigation of Heat Island Effect	Plan Review	Inspections
<input type="checkbox"/>	<p><b>501.3.5.1 Site Hardscape.</b> At least 50% of the <i>site hardscape</i> of new commercial building projects shall comply with one or any combination of the following:</p> <ul style="list-style-type: none"> <li>a. Trees and vegetation planted to provide full shade no later than ten years after project completion. The effective shade coverage on the <i>hardscape</i> shall be the arithmetic mean of the shade coverage calculated at 10 a.m., noon, and 3 p.m. on the summer solstice.</li> <li>b. Paving materials with a minimum initial <i>solar reflectance index (SRI)</i> of 29. A default SRI value of 35 for new concrete without added color pigment is allowed to be used instead of measurements.</li> <li>c. <i>Open-graded (uniform-sized) aggregate, permeable pavement, permeable pavers, and porous pavers (open-grid pavers)</i>. Permeable pavement and permeable pavers shall have a percolation rate of not less than 2 gal/min • ft<sup>2</sup>.</li> <li>d. Shading through the use of structures, provided that the top surface of the shading structure complies with the provisions of Section 501.3.5.3.</li> <li>e. Parking under a building, provided that the <i>roof</i> of the building complies with the provisions of Section 501.3.5.3.</li> <li>f. Adjacent buildings or structures that provide shade to the <i>site hardscape</i>. The effective shade coverage on the <i>hardscape</i> shall be the arithmetic mean of the shade coverage calculated at 10 a.m., noon, and 3 p.m. on the summer solstice.</li> </ul>	Planning and Green/Energy Review	Planning and Green/Energy Inspection

**New Construction Checklist**

More information at Scottsdale Building Code  
[www.scottsdaleaz.gov/codes/building-code](https://www.scottsdaleaz.gov/codes/building-code)

**Planning and Development**  
**Office of Environmental Initiatives**  
Anthony Floyd, FAIA, LEED BD+C, NOMA  
afloyd@scottsdaleaz.gov  
480-312-4202

