# GENERAL

## SECTION INCLUDES

## [Note to A/E: Edit to remove any unused outlet/inlet types.]

### Diffusers.

### Registers/grilles.

### Louvers.

### Roof Hoods.

### Goosenecks.

## REFERENCES

### See Section 23 05 00.

## SUBMITTALS

### See Section 23 05 00.

## PROJECT RECORD DOCUMENTS

### See Section 23 05 00.

## QUALITY ASSURANCE

### Test and rate air outlet and inlet performance in accordance with ADC Equipment Test Code 1062 and ASHRAE 70.

### Test and rate louver performance in accordance with AMCA 500. Submit AMCA certification with submittal.

## QUALIFICATIONS

### Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum five (5) years documented experience.

# PRODUCTS

## CEILING DIFFUSERS

### General: Except as otherwise indicated, provide manufacturer's standard ceiling air diffusers where shown; of size, shape, capacity and type indicated; constructed of materials and components as indicated, and as required for complete installation.

### Performance: Provide ceiling air diffusers that have, as minimum, temperature and velocity traverses, throw and drop, and noise criteria ratings for each size device as listed in manufacturer's current data.

### Ceiling Compatibility: Provide diffusers with border styles that are compatible with adjacent ceiling systems, and that are specifically manufactured to fit into ceiling module with accurate fit and adequate support. Refer to general construction drawings and specifications for types of ceiling systems which will contain each type of ceiling air diffuser.

### Types: Provide ceiling diffusers of type, capacity, and with accessories and finishes as listed on diffuser schedule.

## WALL REGISTERS AND GRILLES

### General: Except as otherwise indicated, provide manufacturer's standard wall registers and grilles where shown; of size, shape, capacity and type indicated; constructed of materials and components as indicated, and as required for complete installation.

### Performance: Provide wall registers and grilles that have, as minimum, temperature and velocity traverses, throw and drop, and noise criteria ratings for each size device and listed in manufacturer's current data.

### Wall Compatibility: Provide registers and grilles with border styles that are compatible with adjacent wall systems, and that are specifically manufactured to fit into wall construction with accurate fit and adequate support. Refer to general construction drawings and specifications for types of wall construction which will contain each type of wall register and grille.

### Types: Provide wall registers and grilles of type, capacity, and with accessories and finishes as listed on register and grille schedule.

## LOUVERS

### General: Except as otherwise indicated, provide manufacturer's standard units where shown; of size, shape, capacity, finishes, and type indicated; constructed of materials and components as indicated, and as required for complete installation.

### Performance: Provide units that have minimum free area, and maximum pressure drop of each type as listed in manufacturer's current data, complying with schedules.

### Substrate Compatibility: Provide louvers with frame and sill styles that are compatible with adjacent substrate, and that are specifically manufactured to fit into construction openings with accurate fit and adequate support, for weatherproof installation. Refer to general construction drawings and specifications for types of substrate which will contain each type of louver.

### Provide units with 1/2 inch square mesh for exhaust and 3/4 inch for intake birdscreens, insect screens are not allowed. Install such that screens are easily removable from an accessible location.

## ROOF HOODS

### General: Except as otherwise indicated, provide manufacturer's standard units where shown; of size, shape, capacity, finishes, and type indicated; constructed of materials and components as indicated, and as required for complete installation.

### Performance: Provide units that have minimum free area, and maximum pressure drop of each type as listed in manufacturer's current data, complying with schedules.

### Mount roof hoods on minimum 24” high insulated curb bases unless otherwise noted.

### Provide units with 1/2 inch square mesh for exhaust and 3/4 inch for intake birdscreens, insect screens are not allowed.

## GOOSENECKS

### Fabricate in accordance with SMACNA HVAC Duct Construction Standards ‑ Metal and Flexible, of minimum 18 gage type 304 welded stainless steel, unless otherwise noted.

### Mount on minimum 12 inch high curb base where size exceeds 9 x 9 inch. Terminate gooseneck minimum 36” above roof.

# EXECUTION

## INSTALLATION

### Install in accordance with manufacturer's instructions.

### Check location of outlets and inlets and make necessary adjustments in position to conform with architectural features, symmetry, and lighting arrangement.

### Install diffusers to ductwork with adjustable elbow. Install maximum length of 3’ of flexible duct upstream of each diffuser and grille, unless otherwise noted. See details on Drawings. All connections shall be air tight.

### In laboratories with ventilated workstations, position diffusers so that airflow is directed parallel to the front of the workstation, not perpendicular to it.

### Where diffusers are located near fume hoods, canopy hoods, biological safety cabinets, or other devices which are sensitive to air turbulence, install diffuser to direct airflow parallel to the front face of the device (i.e. not directed at device).

### Provide balancing dampers on duct take‑off to diffusers, and grilles and registers, despite whether dampers are specified as part of the diffuser, or grille and register assembly. Where a balancing damper has been omitted from drawing, consult engineer.

### Paint ductwork visible behind air outlets and inlets matte black.

### Provide return air sound boot on grilles as shown on drawings.

### Where slot diffusers or linear diffusers are located near perimeter windows, adjust at least one slot to direct air toward window.

END OF SECTION 23 37 00