1. Maximum flex duct length shall be as follows: 36" to diffuser.
2. Flex ducts shall be attached with stainless steel worm gear drive drawbands. Use mastic to cover exposed fiberglass insulation.
3. Unless otherwise noted, all ductwork shall be wrapped with insulation as specified. Duct liner in lieu of duct wrap is not acceptable.
4. Minimum length of straight duct upstream shall be 18" or five (5) duct diameters, whichever is greater. Straight duct shall be same size as air terminal unit inlet.
5. Reheat coil valve must be installed with 18" of actuator and velocity controller.
6. Air terminal unit and valving to be installed in such manner so as to allow for unobstructed access from ceiling tile or access door.

Duct Main, see plan for size

See specifications for transverse joints. Lo-loss 45 degree take-off fitting or side take-off fitting (rectangular main) seal saddle joint to existing duct w/ mastic.

Rectangular Duct, 1.0" Pressure Class.

45 degree side take-off fitting flexmaster sto or equivalent.

Manual balancing damper with stand-off bracket, through shaft and quadrant handle.

Round longitudinal lock seam duct, see specifications for size.

Elbows(s), if required. Adjustable type. Seal with mastic after installation.

Diffuser, see plans for CFM and neck size.

Use adjustable elbows for all changes of direction. Flex duct is not acceptable.

SEAL LONGITUDINAL JOINTS WITH MASTIC SEE SPECIFICATIONS FOR TRANSVERSE JOINTS.

REHEAT COIL, SEE NOTE TRANSITION, IF REQUIRED.

MANUAL BALANCING DAMPER WITH STAND-OFF BRACKET, THROUGH SHAFT AND QUADRANT HANDLE.

ROUND LONGITUDINAL LOCK SEAM DUCT, SEE SPECIFICATIONS FOR SIZE.

Use adjustable elbows for all changes of direction. Flex duct is not acceptable.

5'-0" Minimum between Air terminal unit outlet and first diffuser take-off.

ACCESS PANEL LOCATED ON BOTTOM OF AIR TERMINAL UNIT.

Air terminal unit, see mechanical equipment schedule.

Actuator and velocity controller, provided by UNL CSG.

Use adjustable elbows for all changes of direction. Flex duct is not acceptable.

Use adjustable elbows for all changes of direction. Flex duct is not acceptable.

Diffuser, see plans for CFM and neck size.

Round spiral duct, see plans for size and orientation.

See specifications for transverse joints. Lo-loss 45 degree take-off fitting or side take-off fitting (rectangular main) seal saddle joint to existing duct w/ mastic.

5'-0" Minimum between air terminal unit outlet and first diffuser take-off.

Spiralmate joints on supply air ducts up stream of terminal unit.

Key Notes:

1. Maximum flex duct length shall be as follows: 36" to diffuser.
2. Flex ducts shall be attached with stainless steel worm gear drive drawbands. Use mastic to cover exposed fiberglass insulation.
3. Unless otherwise noted, all ductwork shall be wrapped with insulation as specified. Duct liner in lieu of duct wrap is not acceptable.
4. Minimum length of straight duct upstream shall be 18" or five (5) duct diameters, whichever is greater. Straight duct shall be same size as air terminal unit inlet.
5. Reheat coil valve must be installed with 18" of actuator and velocity controller.
6. Air terminal unit and valving to be installed in such manner so as to allow for unobstructed access from ceiling tile or access door.

SINGLE DUCT AIR TERMINAL UNIT AND CEILING DIFFUSER

Detail Title:
SINGLE DUCT AIR TERMINAL UNIT AND CEILING DIFFUSER

Detail No.:
23 31 13 - 03

Scale:
N.T.S.

Date:
October 2019

Facilities Planning & Construction
Standard Detail