

The diagram illustrates a cross-section of a firestop assembly. A vertical wall is shown with a horizontal duct passing through it. The wall is labeled 'WALL'. The duct is labeled 'DUCT LOAD'. The firestop assembly is labeled 'FIRESTOP ACCORDING TO UL 1479'. The mineral insulation is labeled 'MINERAL INSULATION'. The diagram shows the firestop assembly installed in the duct, with mineral insulation surrounding it.

The diagrams illustrate three methods for sealing openings in walls and ducts:

- Top Diagram:** Shows a cross-section of a wall with a rectangular opening. The opening is filled with fibrous material and sealed with a permanently resilient sealant. The duct lining is shown as required. Labels include: "1/2\" SPACE ALL AROUND PACKED WITH FIBROUS MATERIAL SEAL WITH PERMANENTLY RESILIENT SEALANT.", "DUCT LINING AS REQUIRED", "DUCT", and "WALL".
- Middle Diagram:** Shows a cross-section of a wall with a rectangular opening. The opening is limited to a desired size (1/2" to 5/8"). The opening is packed with fibrous material and sealed with a resilient non-hardening sealer. Labels include: "IF OPENING LIMITED TO DESIRED 1/2\" TO 5/8\" SPACE, PACK FIBROUS MATERIAL AND SEAL BOTH SIDES WITH RESILIENT NON-HARDENING SEALER", "PIPE SLEEVE OR SHEET METAL SLEEVE", and "WALL".
- Bottom Diagram:** Shows a cross-section of a wall with an irregular opening. The opening is wrapped with 1" thick fibrous material and filled with grout. Labels include: "IF OPENING IS STRUCTURE IS IRREGULAR AND GREATER THAN 1\" WRAP DUCT WITH 1\" THICK FIBROUS MATERIAL AND FILL REMAINING OPENING WITH GROUT", "PIPE", and "WALL".

Diagram illustrating a typical remote operated volume damper linear diffuser connection to a truck duct in non-accessible ceilings. The diagram shows a cross-section of the ceiling assembly with the following components and labels:

- CHAIN GUIDE
- FLEX. CHAIN
- ANGLE STOPS
- FLEXIBLE CONNECTION 6" WIDE AS SPECIFIED
- TRUCK DUCT
- PLENUM
- COLLAR TO DIFFUSER
- 1" x 1" x 1/8" EACH ANGLE SHALL HAVE SLOT FOR ADJUSTING DAMPER.
- DAMPER BLADE
- 2 PARALLEL STEEL COIL SPRINGS
- DUCT DEPTH (MIN.)
- EQUAL
- SASH CHAIN WITH POSITIONING
- LINEAR DIFFUSER

NOTE: FOR ACCESSIBLE CEILINGS, STANDARD VOLUME DAMPER (ROUND OR QUADRANT) MAY BE PROVIDED.

TYPICAL REMOTE OPERATED VOLUME DAMPER LINEAR DIFFUSER CONNECTION TO TRUCK DUCT IN NON-ACCESSIBLE CEILINGS.

Diagram illustrating the tie rod assembly components and labels:

- TIE ROD WITH NUTS & WASHERS
- STRUCTURAL
- CLAMP JAWS
- JAM NUT
- ALL THREADED ROD SIZE AS REQUIRED

Diagram illustrating the assembly of a top hook. The components shown are:

- TOP SLIDE
- NUT & BOLT WITH WASHER ASSEMBLY
- BOTTOM HOOK
- ALL THREADED ROD SIZE AS REQUIRED

DUCT PENETRATION DETAIL
THROUGH ROOF
(NOT TO SCALE)

Technical drawings of a return air duct assembly, showing a side elevation and a cross-section.

Side Elevation Labels:

- METAL STRAP HANGERS TO CEILING.
- ROUND TO OVAL TRANSITION DUCT IF REQUIRED
- INSULATED METAL FLEX. HOSE DUCT MAX. LENGTH = 3'-0"
- STAINLESS STEEL CLAMPS
- V.D. IN DUCT BY MECHANICAL CONTRACTOR
- 1" ACOUSTIC LINING INSIDE 22 GA. STEEL
- MOUNTING TABS BY MECH. CONTRACTOR
- CEILING
- "T" BARS OR PLASTER FRAME BY HVAC CONTRACTOR
- ADJUSTABLE PATTERN CONTROL DEFLECTOR BLADE
- PER DRAWINGS
- SUPPLY

NOTE:

ALL ADJUSTABLE PATTERN CONTROL BLADE SHALL BE SET IN FIELD BY MECHANICAL CONTRACTOR. ALL PATTERN CONTROL BLADE SHALL BE SET -UP TO DIRECT AIRFLOW AWAY FROM EXTERIOR WALL.

Cross-Section Labels:

- ACOUSTIC LINING
- RETURN AIR BOOT 22 GA. STEEL
- BLACK PERFORATED METAL SCREEN
- "T" BARS OR PLASTER FRAME BY GENERAL CONTRACTOR
- PER DRAWINGS
- RETURN IN ROOMS
- RETURN (INACTIVE LENGTH) SECTION

Diagram illustrating the components of a fan assembly, including:

- ACCESS DOOR (TYPICAL)
- ROUND DUCT SHOWN
RECTANGULAR DUCT SIMILAR
- FAN MOTOR
- FAN SECTION
- FAN SUPPORT FRAME
- FLEXIBLE CONNECTION (TYP)
- VIBRATION ISOLATORS AS PER SP (TYPICAL)

Diagram illustrating the components of a condenser pump assembly, including:

- SEE SUPPLEMENTAL STEEL SUPPORT FOR EQUIPMENT DETAIL
- WATER ALARM INTERLOCKED WITH UNIT
- DRAIN LINE 1"
- 1-1/2" DEPTH
- CONDENSATE PUMP
- WATER SENSOR
- AC/FAN COIL UNIT
- ANGLES (TYP.)
- SPRING TYPE VIBRATION ISOLATOR TYPICAL (B)
- THREADED HANGER ROD WITH HEX (TYPICAL)
- 1/2" HEMMED EDGE
- SECONDARY DRAIN PAN 1 GA. GALVANIZED SHEET METAL WITH CONTINUOUSLY SOLDERED CORNERS 12" LARGER THAN FOOTPRINT OF UNIT ALL SIDES

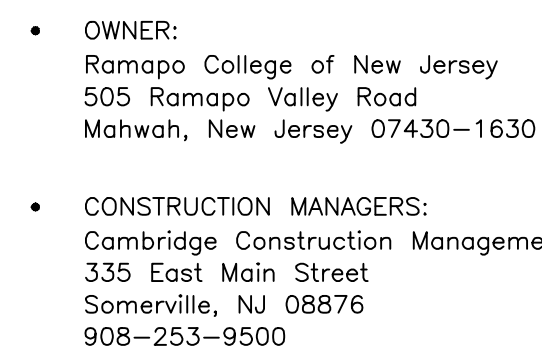
Technical drawing illustrating the installation of a Snorkel Hood. The diagram shows the connection between the roof deck, existing building steel, exhaust duct, ceiling grid, supplemental steel (6" channel), thru bolt (typical), support bracket, snorkel, and hood.

Labels and components shown:

- ROOF DECK
- EXIST. BLDG. STEEL
- EXHAUST DUCT
- CEILING GRID
- SUPPLEMENTAL STEEL (6" CHANNEL)
- THRU BOLT (TYPICAL)
- SUPPORT BRACKET
- SNORKEL
- HOOD

SNORKEL HOOD

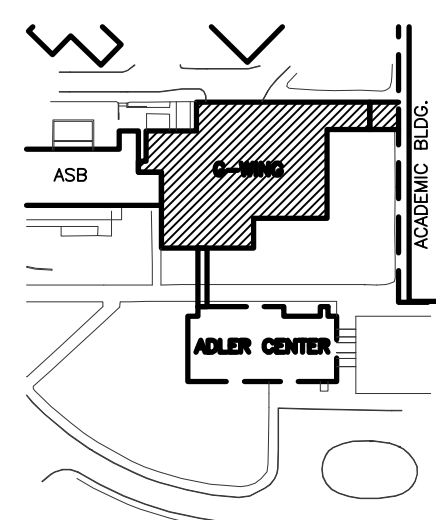
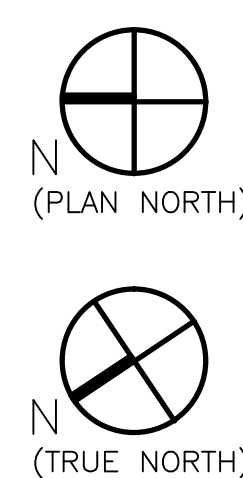
A schematic diagram of a duct system. A horizontal trunk duct on the left has an arrow labeled "AIR FLOW" pointing right. A "VOLUME DAMPER" is located in the trunk duct. The duct then splits into two branches. "BRANCH NO. 1" is the upper branch, and "BRANCH NO. 2" is the lower branch. The angle between the trunk duct and Branch No. 1 is labeled "15° MAX.". The angle between the trunk duct and Branch No. 2 is labeled "20° MAX.". The duct continues horizontally to the right from both branches.



- **ARCHITECT:**
Mitchell/Giorgiolo Architects, LLP
630 Ninth Avenue, Suite 711
New York, New York 10036
212 663 4000
- **MEP ENGINEER:**
Joseph R. Loring & Associates, Inc.
21 Pennsylvania Plaza
New York, NY 10001
212 563 7400
- **STRUCTURAL ENGINEER:**
Ysrael A Seinfeld PC
228 East 45th Street 2nd Floor
New York, NY 10017
212 687 2233

- **LANDSCAPE ARCHITECT:**
Dirtworks, PC
200 Park Avenue South
New York, NY 10003
212 529 2263
- **SITE CIVIL ENGINEER:**
Langan Engineering
619 River Drive Center 1
Elmwood Park, NJ 07407-1338
201 794 6900
- **AV CONSULTANT**
Cerami & Associates
404 Fifth Avenue
New York, NY 10018
212 370 1776

Key Plan:



	6/8/12	DCA FILING
	7/19/12	ISSUED FOR BID
	9/28/12	BID ADDENDUM #3
	1/15/13	ISSUED FOR CONSTRUCTION
	8/12/16	AS-BUILT CONSTRUCTION DOCUMENTS
NP	DATE	COMMENTS
<u>ISSUE/REVISION</u>		

ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR BEFORE PROCEEDING WITH THE WORK.

Project:
G-WING RENOVATION &
ADLER CENTER

Submission:

CONSTRUCTION DOCUMENTS

Drawing Title:
MECHANICAL
DETAILS SHEET No.2

PROJECT Nº:	102700	DATE:	6/8/12
RCNJ PROJ. Nº:	08-240C	SCALE:	NOT TO SCALE

H7.02