

INTERIOR ALTERATIONS AND ADDITION AT 1706 10TH STREET NW WASHINGTON, D.C.

CODE DATA

2006 IBC
2006 IRC
2006 IMC
2006 IFC
2006 NFPA 101 LIFE SAFETY CODE
2006 DISTRICT OF COLUMBIA SUPPLEMENT TO THE 2006 IBC

DRAWING INDEX

A1 COVER SHEET
A2 EXISTING FRONT & REAR PHOTOS
A3 EXISTING FLOOR PLANS
A4 EXISTING FLOOR PLANS
A5 NEW BASEMENT FLOOR PLAN
A6 NEW FIRST FLOOR PLAN
A7 EXISTING SECOND FLOOR PLAN
A8 BUILDING ELEVATIONS & SECTIONS
A8-A FRONT ELEVATION RESTORATION PLAN
A9 FRAMING PLAN
A10 FRAMING PLAN
A11 FRAMING PLAN
A12 DETAILS
A13 DECK DETAILS
A14 SCHEDULES
E1 ELECTRICAL FLOOR PLANS
E2 ELECTRICAL FLOOR PLANS PANEL SCHEDULES
E3 ELECTRICAL PLANS RISER & LEGEND
P1 PLUMBING PLAN
P2 PLUMBING PLAN RISER & LEGEND
P3 LEGEND & RISER
M1 MECHANICAL PLANS
M2 MECHANICAL PLANS
M3 SOLAR PANELS & NOTES DETAILS
M4 TANKLESS WH & HVAC UNIT-1
M5 HVAC DETAILS & DATA
M6 HVAC DETAILS & DATA
C1 LIMIT OF DISTURBANCE PLAN

BOARD OF ZONING ADJUSTMENT
District of Columbia
CASE NO. 18278
EXHIBIT NO. 16

BUILDING DATA

EXISTING BUILDING TYPE: SINGLE FAMILY DWELLING
BUILDING USE GROUP: R-3
TYPE OF CONSTRUCTION: TYPE 3B
BUILDING NOT SPRINKLED
BUILDING ZONING: R-4



SITE LOCATION PLAN

SCOPE OF WORK

1. WORK CONSIST OF INTERIOR ALTERATIONS AND A 2 STORY AND BASEMENT REAR ADDITION, WHICH WILL INCLUDE NEW BATHROOM & KITCHEN FIXTURES, APPLIANCES, CABINETS, FLOOR COVERING & TRIM.
2. WORK WILL INCLUDE NEW HVAC SYSTEMS, AND A SOLAR WATER HEATING SYSTEM, WITH TANKLESS BACKUP. THE WORK ALSO INCLUDES UPGRADING THE PLUMBING & ELECTRICAL SYSTEMS (EXISTING SERVICE TO REMAIN, WIRING & FIXTURES INCLUDED). REPLACE NON CONFORMING PIPING, AND REPLACE WITH CODE COMPLIANT PIPING.
3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DISTRICT OF COLUMBIA BUILDING CODE, AND ALL APPLICABLE BUILDING CODES.
4. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
5. CONTRACTOR SHALL REMOVE ALL DEBRIS ON A DAILY BASIS, AND SHALL PROTECT ADJOINING PROPERTIES FROM DEBRIS AND DAMAGE.

SHEET NO:
A1
SHEET TITLE:
COVER SHEET



Project: ARNOLD YOUNG RESIDENCE
Name: BASEMENT RENOVATION &
Company: ADDITION
Address: 1706 10TH STREET
City: WASHINGTON, DC
State: DISTRICT OF COLUMBIA

DESIGN BY:
TN THOMAS DESIGN SERVICES, INC.
6319 WOOD POINTE DRIVE, GLENN DALE, MARYLAND 20769
301-352-4335 PH. 301-352-4330 FAX. TN.THOMAS@PRODIGY.NET

Board of Zoning Adjustment
District of Columbia
CASE NO. 18278
EXHIBIT NO. 16



EXISTING FRONT AND REAR PHOTOS

DESIGN BY:

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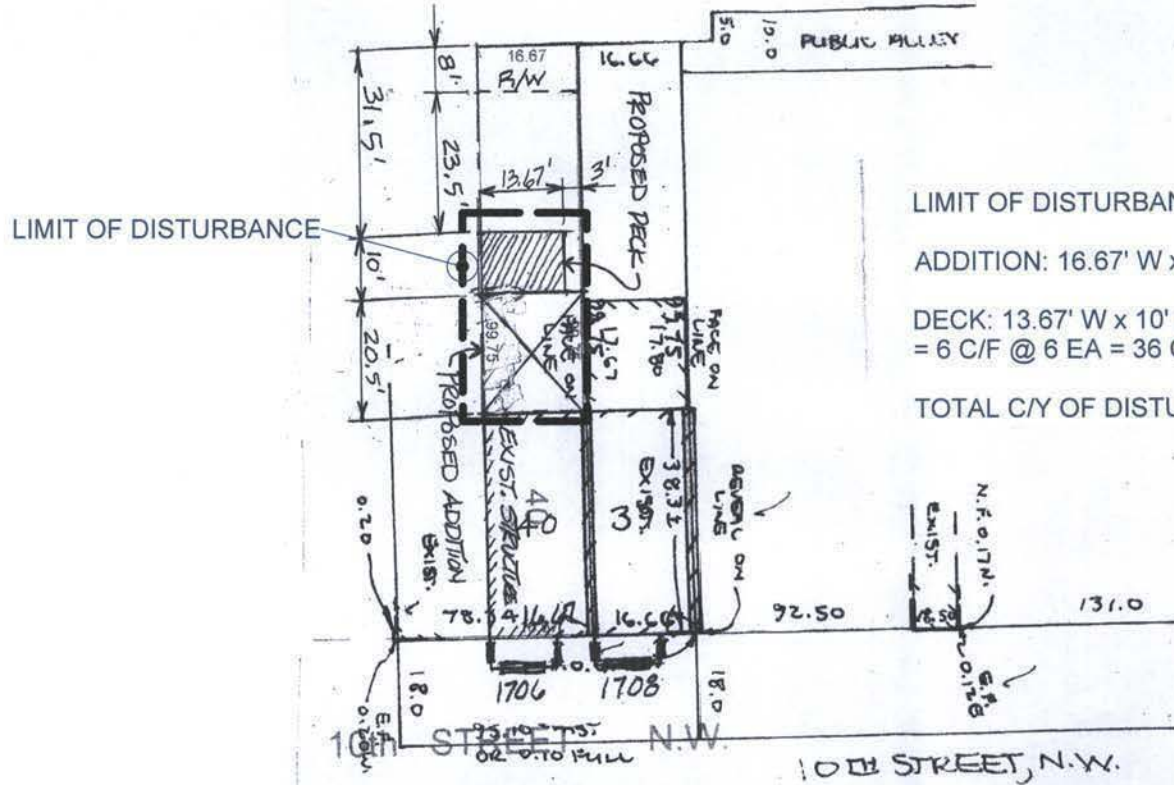
Project ARNOLD YOUNG RESIDENCE
Name BASEMENT RENOVATION &
Company ADDITION
Street 1706 10TH STREET
City WASHINGTON, DC 20004



SHEET NO: A2
SHEET TITLE: EXISTING BUILDING PHOTO'S PLAN

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LIMIT OF DISTURBANCE PLAN

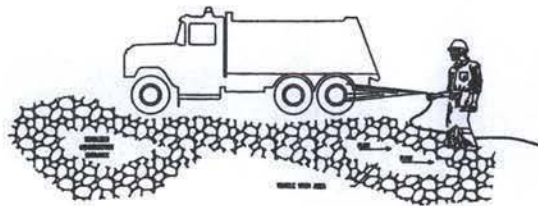
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6319 WOOD POINTE DRIVE, GLENN DALE, MARYLAND 20769
301-352-4335 PH. 301-352-4330 FAX. TN THOMAS@PRODIGY.NET

Project: ARNOLD YOUNG RESIDENCE
Name: BASEMENT RENOVATION & ADDITION
Company:
Street: 1706 10TH STREET
City: WASHINGTON, DC

SHEET NO: C1
SHEET TITLE: LIMIT OF DISTURBANCE PLAN





VEHICLE WASH DETAIL

LIST OF STANDARD SYMBOLS

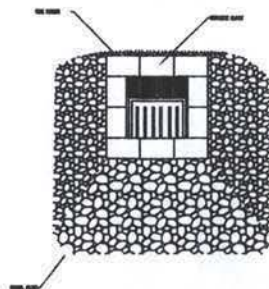
EARTH DIKE	
STRAW BALE DIKE	
SILT FENCE	
TEMPORARY SWALE	
STABILIZED CONSTRUCTION ENTRANCE	
GRADE STABILIZATION STRUCTURE	
PIPE SLOPE DRAIN	
PERIMETER DIKE/SWALE	
INLET PROTECTION	
DIVERSION	
GRASSED WATERWAY	
LINED WATERWAY	
ROCK OUTLET PROTECTION	
SUBSURFACE DRAIN	



SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

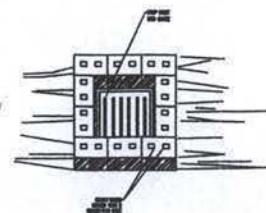
BURLAP DROP INLET SEDIMENT FILTER



SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER



SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

STRAW BALE DROP INLET SEDIMENT FILTER

SOURCE: MICHIGAN SOIL EROSION AND SEDIMENTATION CONTROL GUIDELINES, 1973

STANDARDS AND SPECIFICATIONS FOR BROCAST GROUND COVER

Definition

Temporary ground cover consisting of broken brick (1/2 piece or smaller) placed over denuded earth.

Purpose

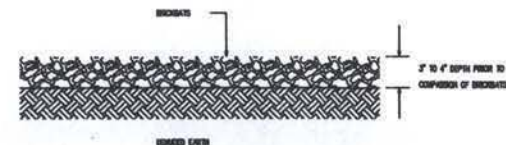
Brickbats provide a temporary ground cover over denuded earth to prevent the transportation of sediment from the site.

Conditions When Practice Applies

Brickbats may be used on any site in need of temporary ground cover.

Design Criteria

The brickbats shall be placed to a depth of 3 inches to 4 inches covering the denuded earth on the site, then compacted and leveled.

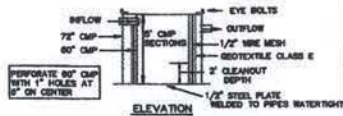


DETAIL NOT TO SCALE

EROSION AND SEDIMENT CONTROL GUIDELINES

SOIL & EROSION DETAILS

DATE	DESIGNED BY	CHECKED BY	APPROVED BY
REV. NO.	REVISIONS	DATE	BY
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STANDARD SYMBOL
PST

Construction Specifications

- The following formula should be used in determining the storage volume of the sediment tank: 1 cubic foot of storage for each gallon per minute of runoff.
- An example of a typical sediment tank is shown above. Other contractor designs can be used if the storage volume is adequate and approved is obtained from the local approving agency.
- Tanks may be connected in series.

PORTABLE SEDIMENT TANK

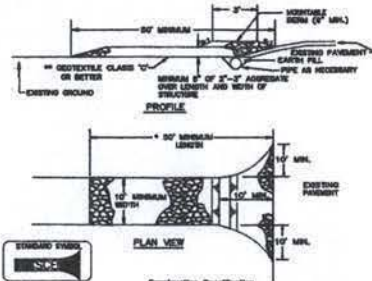
EROSION CONTROL NOTES

- ALL SEDIMENT AND EROSION CONTROL METHODS SHALL BE INSTALLED BEFORE THE START OF ANY EXCAVATION AND/OR CONSTRUCTION. IF AN ON-SITE INSPECTION REVEALS FURTHER EROSION CONTROL MEASURES ARE NECESSARY, THE SAME SHALL BE PROVIDED.
- ALL DEBRIS TO BE REMOVED FROM THE SITE.
- ALLEY AND/OR STREETS/SIDEWALKS SHALL BE KEPT CLEAN AT ALL TIMES DURING EXCAVATIONS AND CONSTRUCTIONS.
- ALL CATCH BASINS OR DRAINS BECOME CLOSED AS A RESULT OF EXCAVATION AND CONSTRUCTION.
- IF ANY CATCH BASINS OR DRAINS BECOME CLOSED AS A RESULT OF EXCAVATION OR CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS CLEANING.
- WHEN SEDIMENT TRAP/SEDIMENT TANK HAS REACHED 67% CAPACITY, CLEAN OUT OF SAME IS REQUIRED.
- ANY STOCKPILING, REGARDLESS OF LOCATION SHALL BE STABILIZED AND COVERED WITH PLASTIC OR CANVAS, AFTER ITS ESTABLISHED AND FOR THE DURATION OF THE PROJECT.
- AFTER RAZE AND DEMOS, THERE IS THE NEED FOR GROUND COVER TO PREVENT EROSION AND SEDIMENT RUNOFF FROM OCCURRING SEED, SOIL, PAVEMENT, BROOKS/AT OR MULCH, ETC.

SEDIMENT CONTROL APPROVAL

PLAN NUMBER
THIS APPROVAL IS FOR EROSION AND SEDIMENT CONTROL ONLY. PERMITTEE/CONTRACTOR IS REQUIRED TO CONSTRUCT SEDIMENT PREVENTION MEASURES.
AT TIMES, NOTIFY THE OFFICE OF WATER RESOURCES AT LEAST 48 HOURS BEFORE START OF EROSION CONTROL, AND WITHIN TWO WEEKS AFTER COMPLETION OF PROJECT FOR FINAL INSPECTION.

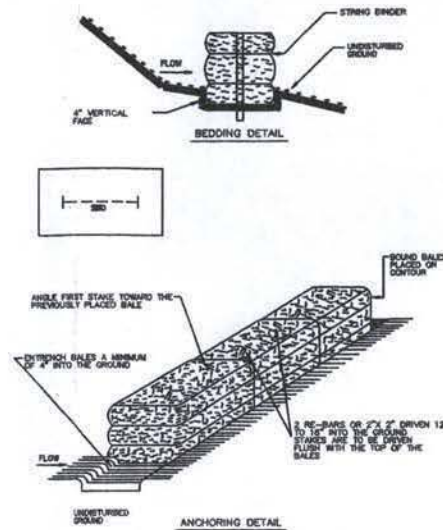
DATE
FLOODING AND EROSION CONTROL DESIGN



Construction Specifications

- Length - minimum of 50' (*30' for slope resistance lot).
- Width - 10' minimum, should be forced at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. *If the plan approved authority may not require single family residences to use geotextile.
- Stone - crushed aggregate (3" to 3") or rounded or regular concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
- Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a coverable form with 6:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the size is limited at a high spot and has no drainage to remedy a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
- Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

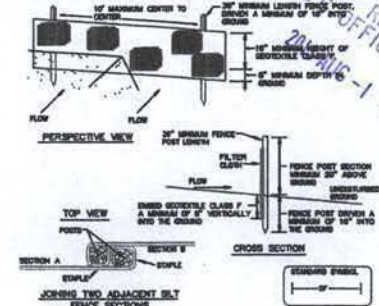
STABILIZED CONSTRUCTION ENTRANCE



Construction Specifications

- Bales shall be placed at the toe of a slope, on the center, and in a row with the ends of each bale tightly abutting the adjacent bales.
- Each bale shall be entrenched in the soil a minimum of 4" and placed so the bindings are horizontal.
- Bales shall be securely anchored in place by either two stakes or re-bars driven through the bale 12" to 18" into the ground. The first stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the top of the bale.
- Straw bale dikes shall be inspected frequently and after each rain event and maintenance performed as necessary.
- All bales shall be removed when the site has been stabilized. The trench where the bales were located shall be graded flush and stabilized.

STRAW BALE DIKE



Construction Specifications

- Fence posts shall be a minimum of 30" long driven 18" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) not, or 1 1/2" diameter (minimum) round and shall be of solid quality hardwood. Wood posts will be standard T or U section weighing not less than 1.00 pound per linear foot.
- Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F1.

Tensile Strength	50 lbs/ft (min.)	Test MSMT 309
Tensile Modulus	50 lbs/ft (min.)	Test MSMT 309
Flow Rate	0.2 gal ft ² minute (max.)	Test MSMT 322
Filtering Efficiency	75% (min.)	Test MSMT 322

- Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Silt Fences shall be inspected after each rainfall event and maintained when bales cover or when sediment accumulation reduced 50% of the fabric height.

Silt Fence Design Criteria

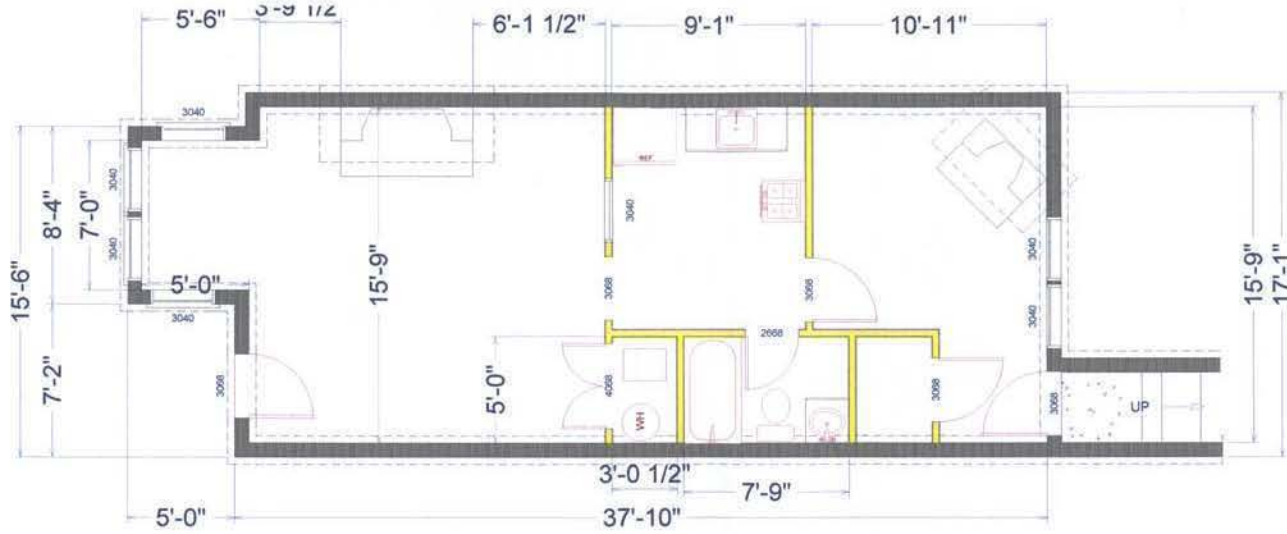
Slope Steepness	(Minimum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	80 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

SILT FENCE

EROSION AND SEDIMENT CONTROL GUIDELINES

SOIL & EROSION DETAILS cont'd



EXISTING BASEMENT FLOOR PLAN
699 sq ft

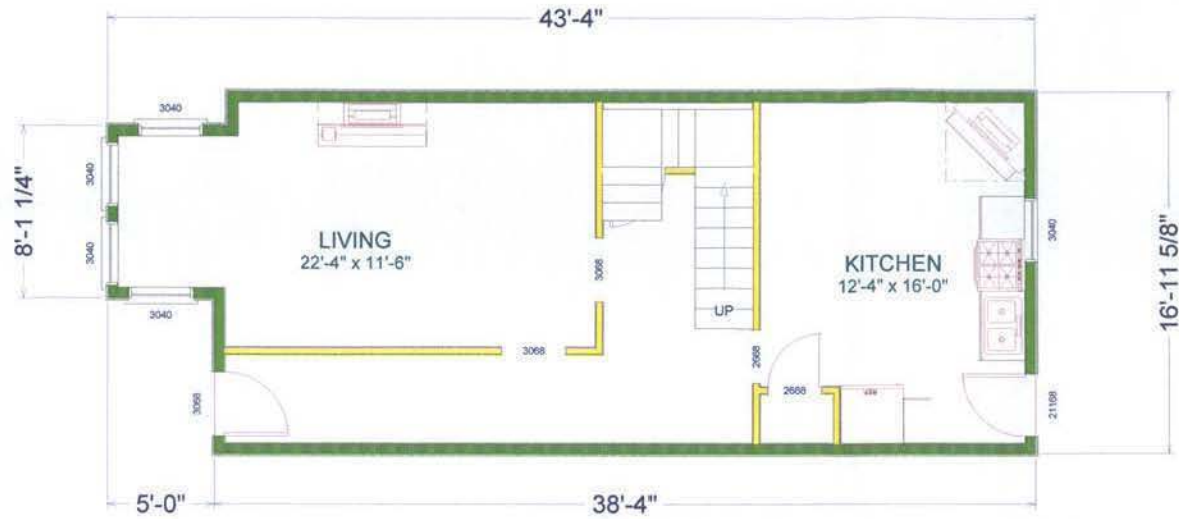
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SHEET NO:
A3
SHEET TITLE:
EXISTING PLANS



Project ARNOLD YOUNG RESIDENCE
Name BASEMENT RENOVATION &
Company ADDITION
Street 1706 10TH STREET
City WASHINGTON, DC

DESIGN BY:
TN THOMAS DESIGN SERVICES, INC.
6319 WOOD POINTE DRIVE, GLENN DALE, MARYLAND 20769
301-352-4335 PH. 301-352-4330 FAX. TN.THOMAS@PRODIGY.NET



EXISTING FIRST FLOOR PLAN

689 sq ft



EXISTING SECOND FLOOR PLAN

629 sq ft

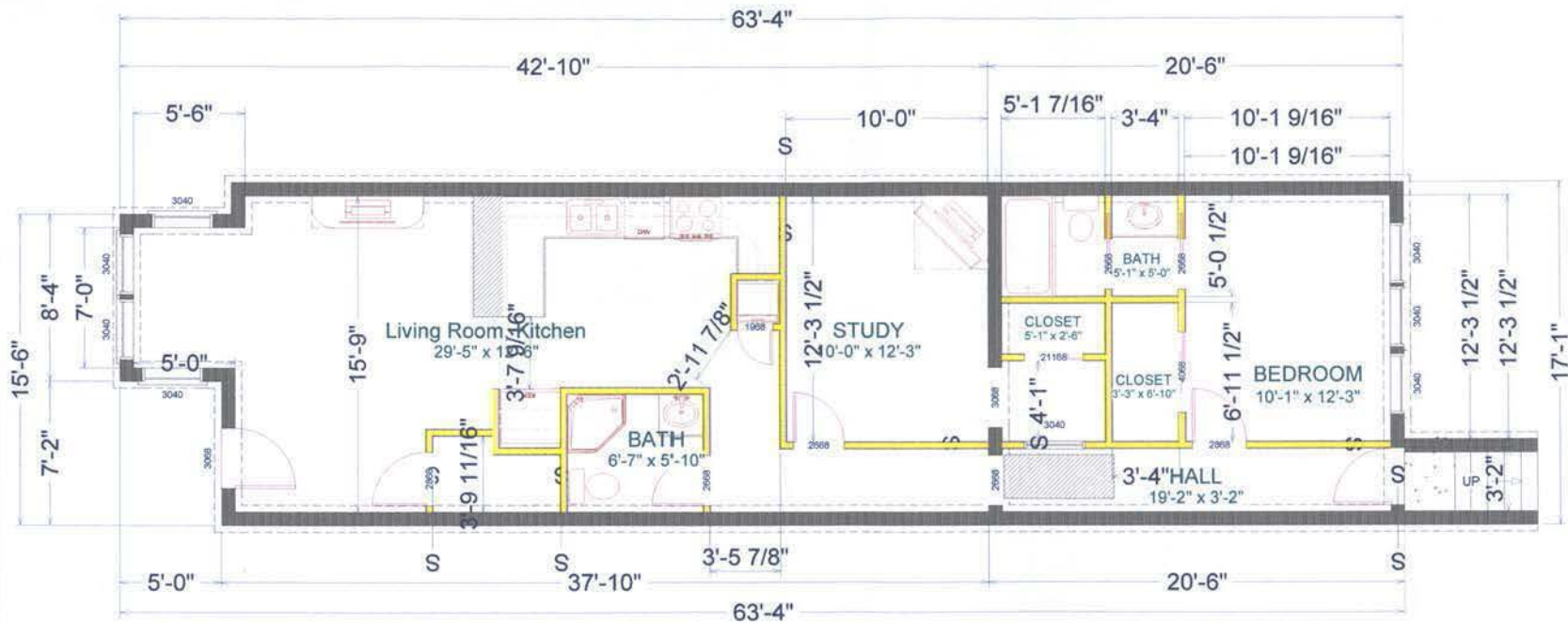
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SHEET NO: A4
SHEET TITLE: EXISTING PLANS



Project: ARNOLD YOUNG RESIDENCE
 Name: BASEMENT RENOVATION & ADDITION
 Company:
 Street: 1706 10TH STREET
 City: WASHINGTON, DC

DESIGN BY:
 TN THOMAS DESIGN SERVICES, INC.
 6319 WOOD POINTE DRIVE, GLENN DALE, MARYLAND 20769
 301-352-4335 PH. 301-352-4330 FAX. TN.THOMAS@PRODIGY.NET



NEW BASEMENT FLOOR PLAN
1036 sq ft

Historic Preservation Clearance for Exterior Work. Scope of approved exterior work is restricted only to drawings with this stamp.
Signature and date: *[Signature]* 6/1/2011

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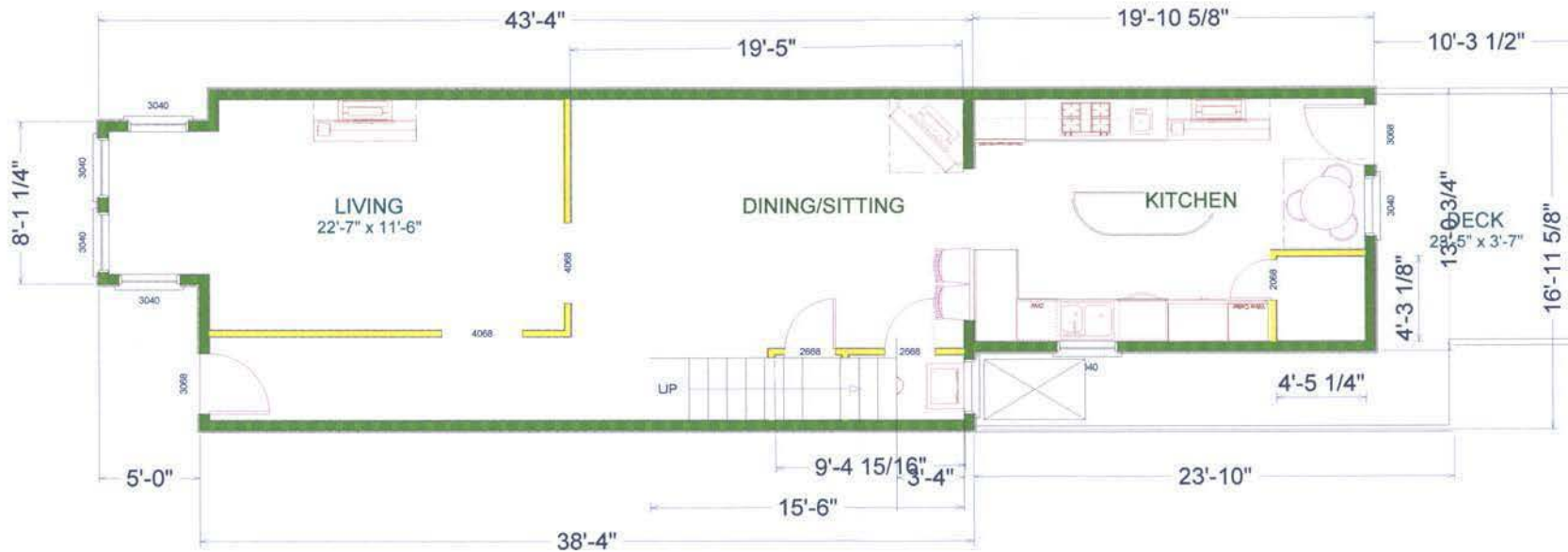
TN THOMAS DESIGN SERVICES, INC.
6319 WOOD POINTE DRIVE, GLENN DALE, MARYLAND 20769
301-352-4335 PH. 301-352-4330 FAX. TN.THOMAS@PRODIGY.NET

Project: ARNOLD YOUNG RESIDENCE
Name: BASEMENT RENOVATION & ADDITION
Company: Street 1706 10TH STREET
City: WASHINGTON, DC



SHEET NO: A5
SHEET TITLE: NEW BASEMENT FLOOR PLAN

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NEW FIRST FLOOR PLAN 951 sq ft

Historic Preservation Clearance for Exterior Work. Scope of approved exterior work is restricted only to drawings with this stamp.
Signature and date: *[Signature]* 6/1/2011

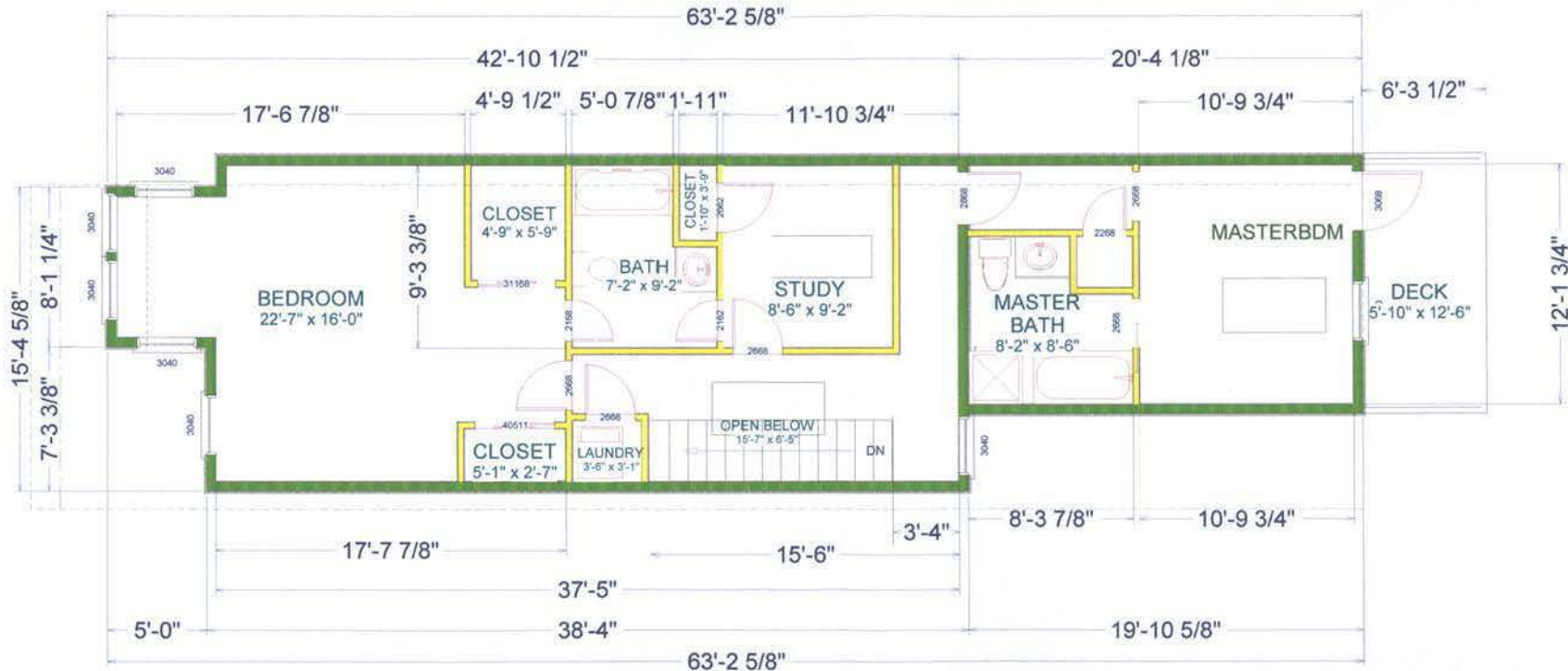
SHEET NO: **A6**
SHEET TITLE:
NEW FIRST FLOOR PLAN



Project **ARNOLD YOUNG RESIDENCE**
Name **BASEMENT RENOVATION & ADDITION**
Company
City **1706 10TH STREET**
City **WASHINGTON, DC**

DESIGN BY:
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NEW SECOND FLOOR PLAN
789 sq ft

Historic Preservation Clearance for Exterior Work. Scope of approved exterior work is restricted only to drawings with this stamp.

Signature and date: SW 6/1/2011

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Project: ARNOLD YOUNG RESIDENCE
Name: BASEMENT RENOVATION & ADDITION
Company:
Street: 1706 10TH STREET
City: WASHINGTON, DC



SHEET NO: **A7**
SHEET TITLE:
NEW SECOND FLOOR PLAN



RENEWAL BY ANDERSEN 1 OVER 1
REPLACEMENT WINDOWS TYPICAL

REFINISH EXISTING DOOR & REPLACE
EXISTING LITES WITH GLASS

REPAIR & RESTORE
EXISTING RAILING & STAIRS

REPLACE EXISTING DOOR WITH
JELD WEN FIBERGLAS DOOR

FINISH GRADE/ SIDE WALK

NOTE:

REPOINT BRICK WHERE NECESSARY

Historic Preservation Clearance for Exterior
Work. Scope of approved exterior work is
restricted only to drawings with this stamp.

Signature and date: *Sam W. 6/1/2021*

FRONT ELEVATION

FIBERLAST DOOR SPECIFICATIONS

FiberLast Doors - Smooth (FL), Woodgrain White (FW), Woodgrain Stainable Tan (FK)

Door Series	Width	Height*	Outer Stiles	Center Mullion	Top Rail	Lock Rail	Glass Cut Out
FLUSH							
FL	2'6", 2'8", 2'10", 3'0"	6'8"	N/A	N/A	N/A	N/A	up to 23" x 65"
FL	2'8", 3'0"	7'0"	N/A	N/A	N/A	N/A	up to 23" x 65"
6-PANEL							
FW, FK	2'6"	6'8"	4-3/8"	4-3/8"	4-7/8"	6-7/16"	up to 21" x 65"
FL, FW, FK	2'8", 2'10", 3'0"	6'8"	4-3/8", 5-3/8", 6-3/8"	5"	4-7/8"	6-7/16"	up to 23" x 65"
FL, FW, FK	2'8", 3'0"	7'0"	4-3/8", 6-3/8"	5"	4-7/8"	6-7/16"	up to 23" x 65"
FL, FW, FK	2'8", 3'0"	8'0"	4-3/8", 6-3/8"	5"	6-5/8"	8"	up to 23" x 81"
4-PANEL DOOR WITH BLANK TOP							
FL, FW, FK	2'8", 3'0"	6'8"	4-3/8", 6-3/8"	5"	4-7/8"	6-7/16"	up to 23" x 65"
HALF-SITE							
FW, FK	2'6"	6'8"	4-3/8"	4-3/8"	4-7/8"	6-7/16"	21" x 37"
FL, FW, FK	2'8", 2'10", 3'0"	6'8"	4-3/8", 5-3/8", 6-3/8"	5"	4-7/8"	6-7/16"	23" x 37"
FL, FW, FK	2'8", 3'0"	7'0"	4-3/8", 6-3/8"	5"	4-7/8"	6-7/16"	23" x 37"
FL, FW, FK	2'8", 3'0"	8'0"	4-3/8", 6-3/8"	5"	6-5/8"	8"	23" x 49"
FULL-SITE							
FW, FK	2'6"	6'8"	4-3/8"	N/A	4-7/8"	N/A	21" x 65"
FL, FW, FK	2'8", 2'10", 3'0"	6'8"	4-3/8", 5-3/8", 6-3/8"	N/A	4-7/8"	N/A	23" x 65"
FL, FW, FK	2'8", 3'0"	7'0"	4-3/8", 6-3/8"	N/A	4-7/8"	N/A	23" x 65"
FL, FW, FK	2'8", 3'0"	8'0"	4-3/8", 6-3/8"	N/A	6-5/8"	N/A	23" x 81"

FiberLast Sidelights - Smooth (FL), Woodgrain White (FW), Woodgrain Stainable Tan (FK)

The Technology Behind the Beauty

Customize your windows with high-profile grilles

Renowned by Andersen offers a variety of grille options to enhance the look of your windows. Our new high-profile grilles are beautifully styled from handwood or recycled aluminum. All of our grilles are designed for long-lasting, low maintenance performance.*

Match your home's current architecture, or use grilles to change the look and style of your home.

Renowned by Andersen grilles are appropriate for most historic renovation projects.



Interior wood grille
With the option of handwood or oak, these grilles snap into clips on the interior of the sash and remove easily for glass cleaning. Available in two widths.



Full divided light grille
Full divided light grilles provide a visual indication of true divided glass. The option consists of a permanently applied exterior Fibre®-nailed grille or aluminum spacer between the glass, and a removable or permanently applied interior maple or oak handwood grille. Available in two widths.



Grilles between the glass
To prevent pre-finished aluminum grilles from permanently marring the panes during manufacturing, providing the beauty of grilles with the quick clearing of a smooth glass surface. Available in two widths.

* For the full information for a copy of the Renowned by Andersen 2021-22 price sheet, visit www.renowned.com

HIGH-PROFILE GRILLE OPTIONS

	Interior wood grille	Full divided light grille	Grilles between the glass
Home Interior	NA	NA	NA
Between Glass	NA	NA	NA
Home Exterior	NA	NA	NA

GRILLE PATTERNS

	Colonial	Prairie	Modified Prairie	Farmhouse
Colonial	Select the number of squares desired per sash.	Pattern always includes two vertical and two horizontal bars per sash to form diamond squares in the corners.	Pattern always includes two vertical bars and one horizontal bar per sash.	A classic design where two vertical bars meet a wider horizontal bar or bar at the corner of the window.

FIBERLAST | SMOOTH, WOODGRAIN WHITE & WOODGRAIN STAINABLE TAN



Project: ARNOLD YOUNG RESIDENCE
Name: BASEMENT RENOVATION & ADDITION
Company: COMPANY
Street: 1706 10TH STREET
City: WASHINGTON, DC

DESIGN BY:

TN THOMAS DESIGN SERVICES, INC.

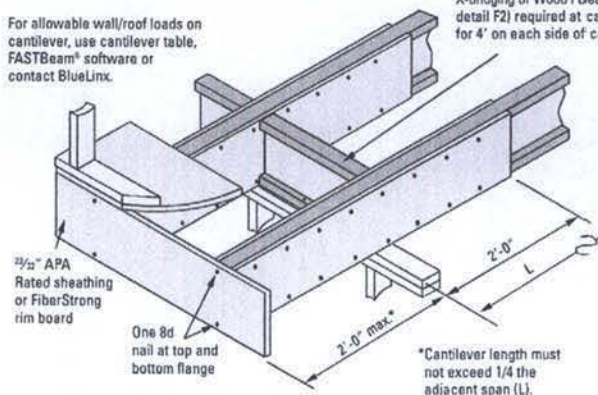
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301-552-4335 PH. 301-552-4330 FAX. TN THOMAS@PRODIGY.NET

SHEET NO: A8-A
SHEET TITLE: FRONT ELEVATION RESTORATION PLAN



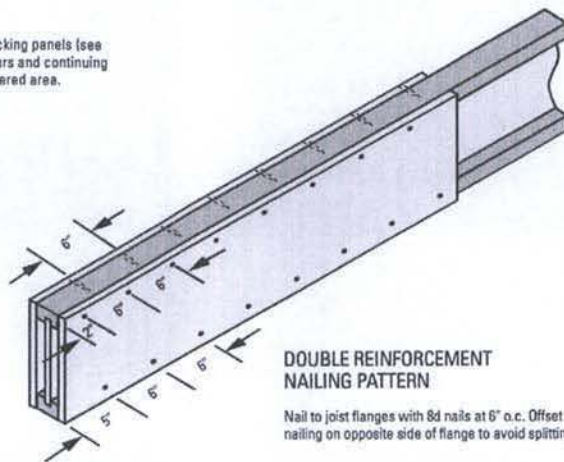
C3 CANTILEVER, REINFORCED Double Sheathing/Rim Board (Option II)

For allowable wall/roof loads on cantilever, use cantilever table, FASTBeam® software or contact BlueLine.



Note: FiberStrong rim board or 48/24 APA Rated sheathing (strength axis horizontal) required both sides of joist. Depth must match full depth of joist.

X-bridging or Wood I Beam blocking panels (see detail F2) required at cantilevers and continuing for 4' on each side of cantilevered area.



DOUBLE REINFORCEMENT NAILING PATTERN

Nail to joist flanges with 8d nails at 6" o.c. Offset nailing on opposite side of flange to avoid splitting.

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PROJECT TITLE: DETAILS
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Project: ARNOLD YOUNG RESIDENCE
Name: BASEMENT RENOVATION & ADDITION
Company: Street 1706 10TH STREET
City: WASHINGTON, DC

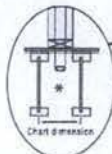
Plumbing Details

P1 JOIST SPACING BELOW PLUMBING WALL Parallel to wall

Joist Spacing		
Joist	2x4 Wall	2x6 Wall
GPI 20	5 1/4"	7 1/4"
GPI 40 and 65 WI 40 and 60	6"	8"
GPI 90/WI 80	7"	9"

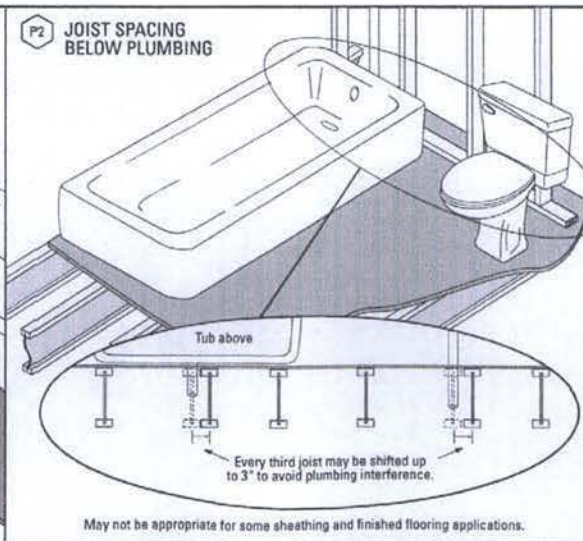
Non-load bearing wall only

Every third joist may be shifted up to 3" to avoid plumbing interference.



*Provide blocking between adjacent joists when needed to support panel ends.

P2 JOIST SPACING BELOW PLUMBING



May not be appropriate for some sheathing and finished flooring applications.

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APPLIANCE & FIXTURE/CABINET SCHEDULE							
ROOM	APPLIANCE	TYPE	SIZE	COLOR	MANUFAC	MODEL	
KITCHEN	COOKTOP	ELEC	30" W x 23 3/16" D		GE	OR EQUAL	
KITCHEN	WARMER OVEN	ELEC	29 7/8" W x 25 3/8" D		GE	OR EQUAL	
KITCHEN	REFRIGERATOR	ELEC	29 1/2" W x 32 1/8" D		GE	OR EQUAL	
KITCHEN	WALL OVEN	ELEC					
KITCHEN	DISHWASHER	ELEC	24" W x 24" D		GE	OR EQUAL	
KITCHEN	SINK	SS	33" x 22"		KOHLER	OR EQUAL	
KITCHEN	TRASH COMPACTOR	ELEC			GE	OR EQUAL	
KITCHEN	FAUCET				DELTA	OR EQUAL	
KITCHEN	CHEF SINK	SS	31 7/8" x 31 7/8"		KOHLER	OR EQUAL	
KITCHEN	BAR SINK	SS	29 7/8" W x 20" D		KOHLER	OR EQUAL	
LAUDRY	WATER HEATER	ELEC	22" DIA.		BRAFORD WHITE	OR EQUAL/50GAL	
LIVING	FIREPLACE	NA					
KITCHEN	DISPOSAL	ELEC	7 1/2" DIA x 13 7/16" D		GE	OR EQUAL/GFC530P 1/2HP	
LAUDRY	WASH/DRY	ELEC	23 7/8" W x 27 1/2" D		GE	OR EQUAL/WSM2420/80D	
KITCHEN	COUNTERTOP						
KITCHEN	CABINETS				KRAFTMAID	OR EQUAL	
BATH	VANITY				KRAFTMAID	OR EQUAL	
BATH	ACCESSORIES						
"	LAVATORY				KOHLER	OR EQUAL	
"	WATER CLOSET				KOHLER	OR EQUAL	
"	TUB				KOHLER	OR EQUAL	
"	SHOWER				KOHLER	OR EQUAL	
"	MEDECINE CAB.				KRAFTMAID	OR EQUAL	
"	TOWEL RACK						
"	TOILET TISSUE HOLDER						
"	TOOTHBRUSH HOLDER						
"	SOAP DISH						

NOTE: APPLIANCE, FIXTURES AND CABINETS ARE BULDER'S GRADE OR BETTER.

Material Schedule by Room

Room	#	Flooring	Paint/color	Walls	Ceiling	Wainscot	Base	Notes
		CERAMIC VINYL CARPET WOOD E-GLOSS ES-GLOSS S-GLOSS STAIN PAPER CERAMIC GYPSUM WOOD GYPSUM AC-TILE EX-BEAM PLASTER CERAMIC PAPER ASPHALT STONE WOOD CERAMIC RUBBER VINYL						
ENTRY			X	X	X		X	
HALL			X	X	X		X	
LIVING			X	X	X		X	
KITCHEN			X	X	X		X	
BEDRM-1		X		X	X		X	
BEDRM-2		X		X	X		X	
BEDRM-3		X		X	X		X	
BATH	X		X	X		X	X	6 x 6 FLOOR TILE
POWDER	X		X	X	X	X	X	6 x 6 FLOOR TILE
LAUNDRY		X		X	X		X	
CLOSET		X		X	X		X	

DOOR SCHEDULE							
SYM BOL	WIDTH	HEIGHT	THICK NESS	MATERIAL	TYPE	QUAN	REMARKS/HARDWARE
A	3' - 0"	6' - 8"	1 3/8"	HOLLOW METAL	HOLLOW CORE		ENTRY/EXIT DOORS (LOCKS/PANIC BARS, SELF CLOSING)
B	3' - 0"	6' - 8"	1 3/8"	HOLLOW METAL	HOLLOW CORE		PRE-HUNG (HARDWARE INCLUDED)
C	5' - 0"	6' - 8"	1 3/8"	METAL	STORE FRONT		PRE-HUNG, DEAD BOLT LOCKS, SELF CLOSING
D	5' - 0"	6' - 8"	1 3/8"	WOOD/GLA SS	FRENCH		PRE-HUNG
E	6' - 0"	6' - 8"	1 3/8"	WOOD	HOLLOW CORE		PRE-HUNG (HARDWARE INCLUDED)
F	6' - 0"	6' - 8"	1 3/8"	WOOD	HOLLOW CORE		PRE-HUNG (HARDWARE INCLUDED)
G	6' - 0"	6' - 8"	1 3/8"	WOOD	FRENCH		PRE-HUNG
H	3' - 0"	6' - 8"	1 3/8"	WOOD			PRE-HUNG NO LOCKS
I							
J	4' - 0"	6' - 8"	1 3/8"	WOOD	SOLID CORE		HINGED NO LOCKS
K	3' - 0"	6' - 8"	1 3/8"	WOOD	SOLID CORE		PRE-HUNG KEYED LOCKS (HARDWARE INCLUDED)

Historic Preservation Clearance for Exterior Work. Scope of approved exterior work is restricted only to drawings with this stamp.
Signature and date: smc 6/1/2011

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Project ARNOLD YOUNG RESIDENCE
Name BASEMENT RENOVATION &
Company ADDITION

Street 1706 10TH STREET

City WASHINGTON, DC

SHEET NO:

10011110101

A14

SHEET TITLE:
SS SCHEDULES



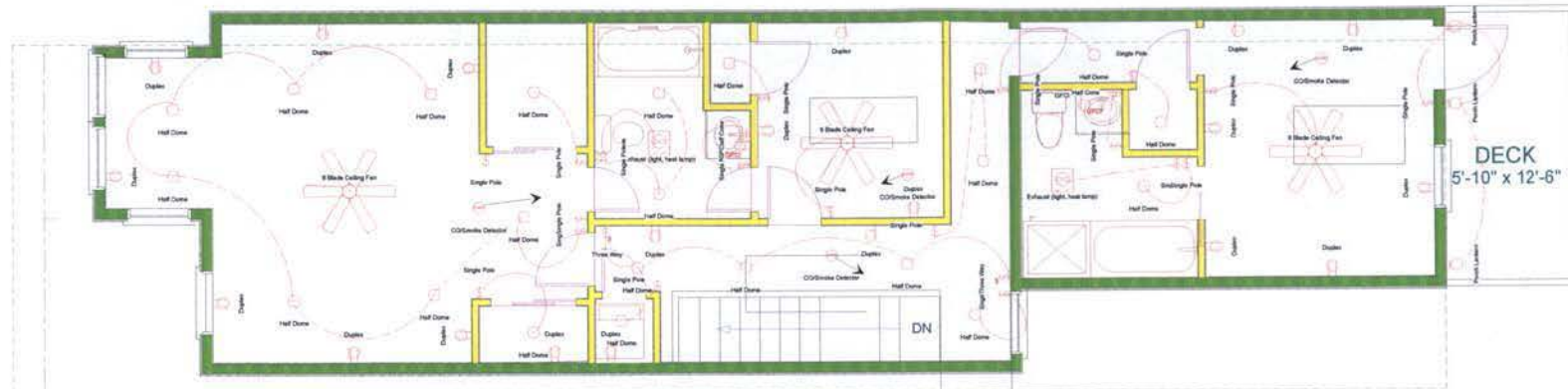
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SHEET TITLE:
ELECTRICAL PLAN &
PANEL SCHEDULES



Project ARNOLD YOUNG RESIDENCE
Name BASEMENT RENOVATION &
Company ADDITION
Street 1706 10TH STREET
City WASHINGTON, DC

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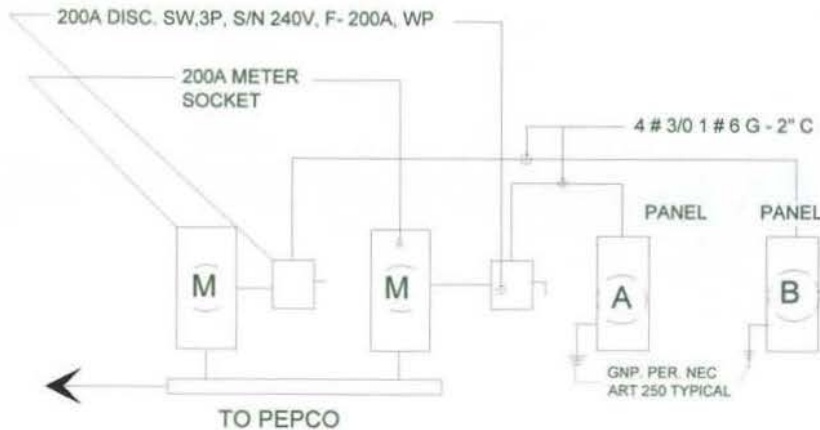
NEW SECOND FLOOR ELECTRICAL PLAN
777 sq ft

PANEL "A"

200 AMP 120/208 V, 3 P 4 W, 60HZ						
CKT NO	LOAD DESIGNATION	CB	A	B	C	CB
1	RECEPTACLES	20				15
3	LIGHTS	20				15
5	HEAT PUMP	25				15
7	EXHAUST FAN	15				30
9	SPARE	20				20
11	COOKTOP	30				15
13	WATER HEATER	25				15
15	DISPOSAL	15				20
17	SPARE	20				
19	"					
21	"					
23	SPARE					

PANEL "B"

200 AMP 120/208 V, 3 P 4 W, 60HZ						
CKT NO	LOAD DESIGNATION	CB	A	B	C	CB
1	RECEPTACLES	20				15
3	LIGHTS	20				15
5	HEAT PUMP	25				15
7	EXHAUST FAN	15				30
9	SPARE	20				20
11	COOKTOP	30				15
13	WATER HEATER	25				15
15	DISPOSAL	15				20
17	SPARE	20				
19	"					
21	"					
23	SPARE					



EXISTING POWER RISER DIAGRAM NOT TO SCALE

Your Schüco Photovoltaic System Includes:

Module

The module turns solar radiation into electricity. Our PV modules have very high performance and long life. Each individual module is output tested before it leaves the factory, so you and your installer know exactly what it will deliver. The serial behind our modules with a 25 year warranty.*

The amplified aluminum frame is corrosion- and torsion-proof, and the front is protected by tempered safety glass for durability. Our modules will look good on your home for the life of the system.

*see Schüco USA Solar Warranty for details

Inverter with Digital Display

The inverter converts direct-current (DC) power from the modules into standard alternating current (AC) power. It contains a display which shows you what your system is generating. Solutions also include wall mounting with weather-proofing and USB connections to a PC.

Switch

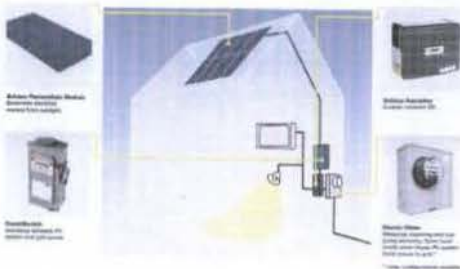
The switch protects your solar module array by cutting off the grid connection in the event of harmful grid power fluctuations or outages.

Net Metering

When your system produces electricity, it feeds the power to your existing electrical panel, which then distributes the solar power (and any utility power needed) to your load center in a normal manner. If you have a so-called "net metering" agreement with your local electric utility, any excess power generated by your system is sent back to the utility. When you generate more power than you need, your electric meter spins backwards and you are only charged for the net energy you consume.

Mounting Hardware

Our SolarEZ mounting system for all modules is specifically engineered for durability and maximum strength.



ELECTRICAL - DATA - AUDIO LEGEND

SYMBOL	DESCRIPTION
	Ceiling Fan
	Ventilation Fans: Ceiling Mounted, Wall Mounted
	Ceiling Mounted Light Fixtures: Surface/Pendant, Recessed, Heat Lamp, Low Voltage
	Wall Mounted Light Fixtures: Flush Mounted, Wall Sconce
	Chandelier Light Fixture
	Fluorescent Light Fixture
	240V Receptacle
	110V Receptacles: Duplex, Weather Proof, GFCI
	Switches: Single Pole, Weather Proof, 3-Way, 4-Way
	Switches: Dimmer, Timer
	Audio Video: Control Panel, Switch
	Speakers: Ceiling Mounted, Wall Mounted
	Wall Jacks: CAT5, CAT5 + TV, TV/Cable
	Telephone Jack
	Intercom
	Thermostat
	Door Chime, Door Bell Button
	Smoke Detectors: Ceiling Mounted, Wall Mounted
	Electrical Breaker Panel

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Project: ARNOLD YOUNG RESIDENCE
Name: BASEMENT RENOVATION & ADDITION
Company: ADDITION
City: 1706 10TH STREET WASHINGTON, DC

SHEET NO:

E3

SHEET TITLE:
ELECTRICAL RISER
& LEGEND



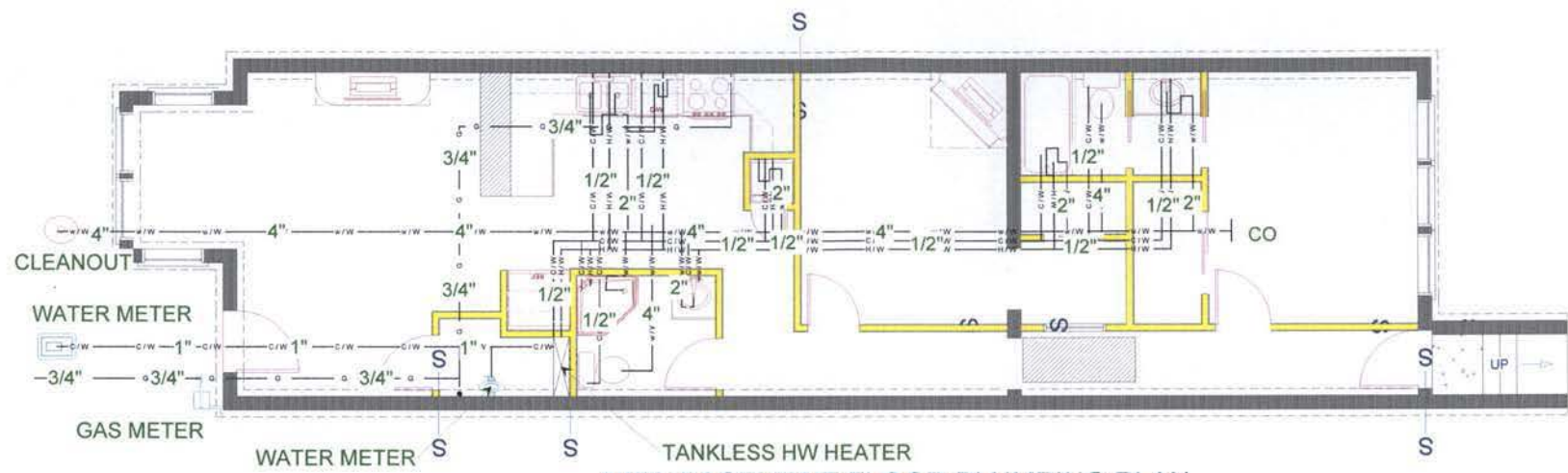
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SHEET NO: **p1**
SHEET TITLE:
**PLUMBING
PLANS**

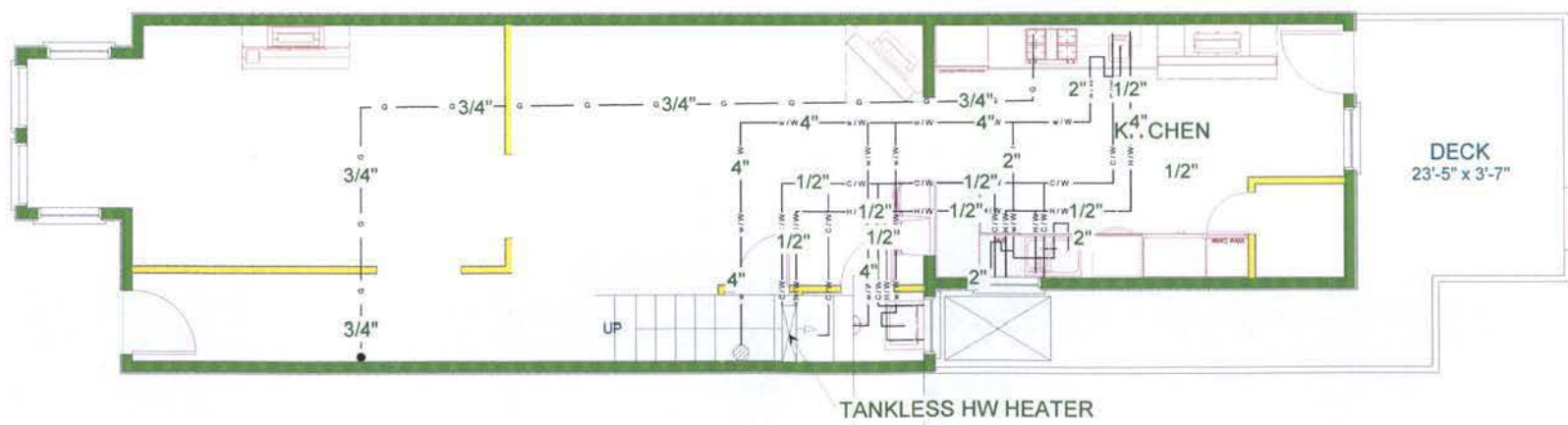


Project **ARNOLD YOUNG RESIDENCE**
Name **BASEMENT RENOVATION &**
Company **ADDITION**
Street **1706 10TH STREET**
City **WASHINGTON, DC**

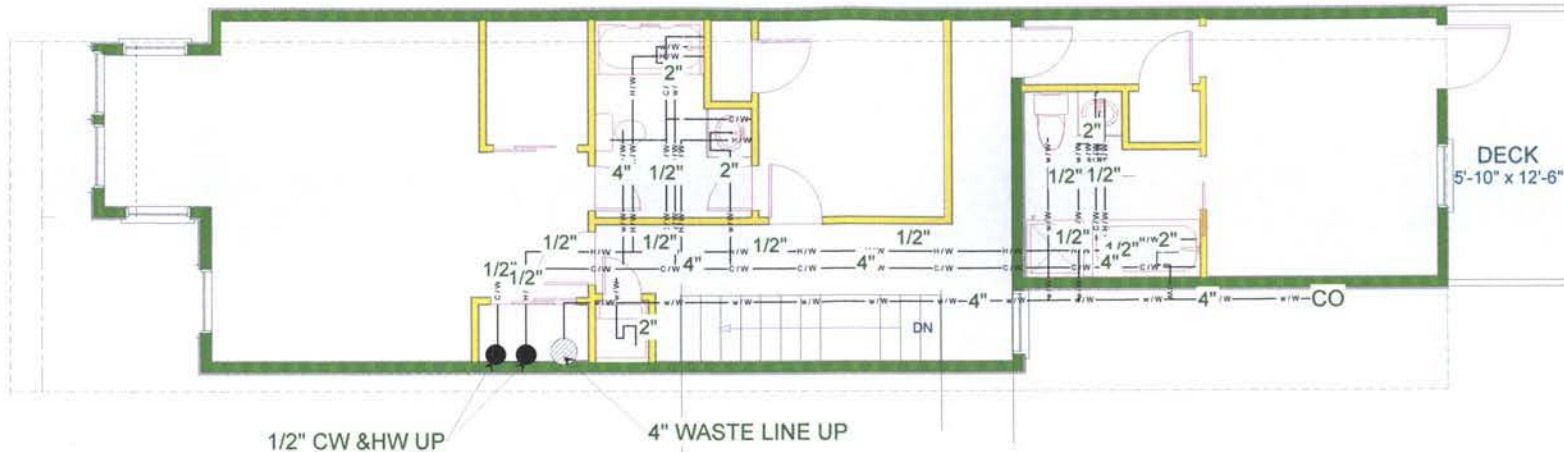
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NEW BASEMENT FLOOR PLUMBING PLAN
1036 sq ft

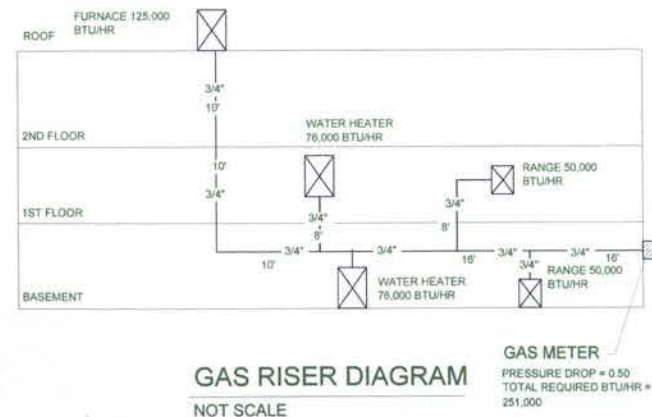


NEW FIRST FLOOR PLUMBING PLAN
950 sq ft



NEW SECOND FLOOR PLUMBING PLAN
777 sq ft

PLUMBING SYMBOLS	
Fixture Drain	
Meter	
Floor Drain	
Grease Trap	
Clean Out	
Sill Cock	
Water Heater	
PUBLIC UTILITIES	
Gas	— G —
Water	— W —
Electricity	— P —
Sanitary Sewer	— S —



GAS RISER DIAGRAM
NOT SCALE

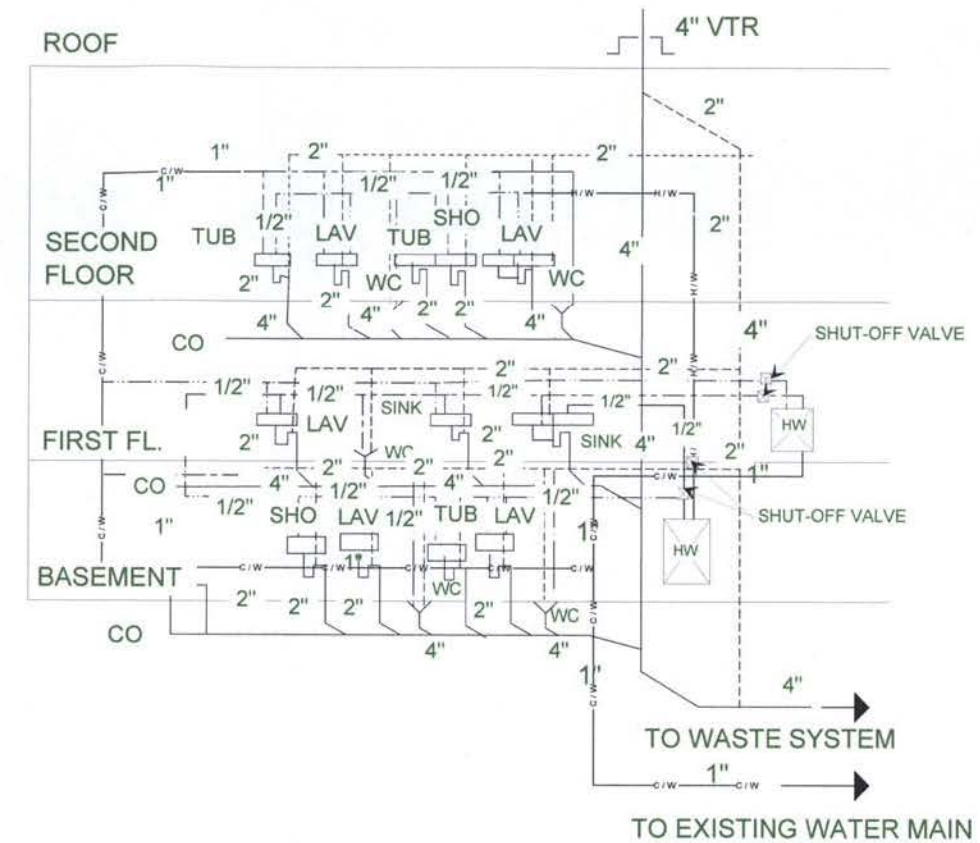
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PROJECT TITLE:
PLUMBING
PLAN, LEGEND &
RISERS

Project ARNOLD YOUNG RESIDENCE
Name BASEMENT RENOVATION &
Company ADDITION
Street 1706 10TH STREET
City WASHINGTON, DC

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PLUMBING SYMBOLS

Soil Or Waste Pipe	
Vent	
Storm Drain	S
Cold Water	
Hot Water	
Fire Line	F
Sprinkler	O
Gas, Low Pressure	G
Clay Tile	CT
Flange gate Valve	
Flange Globe Valve	
Flange Connections	
Screwed Connections	
Welded Connections	
Compressed Air	A



PLUMBING WATER & SEWER RISER DIAGRAM

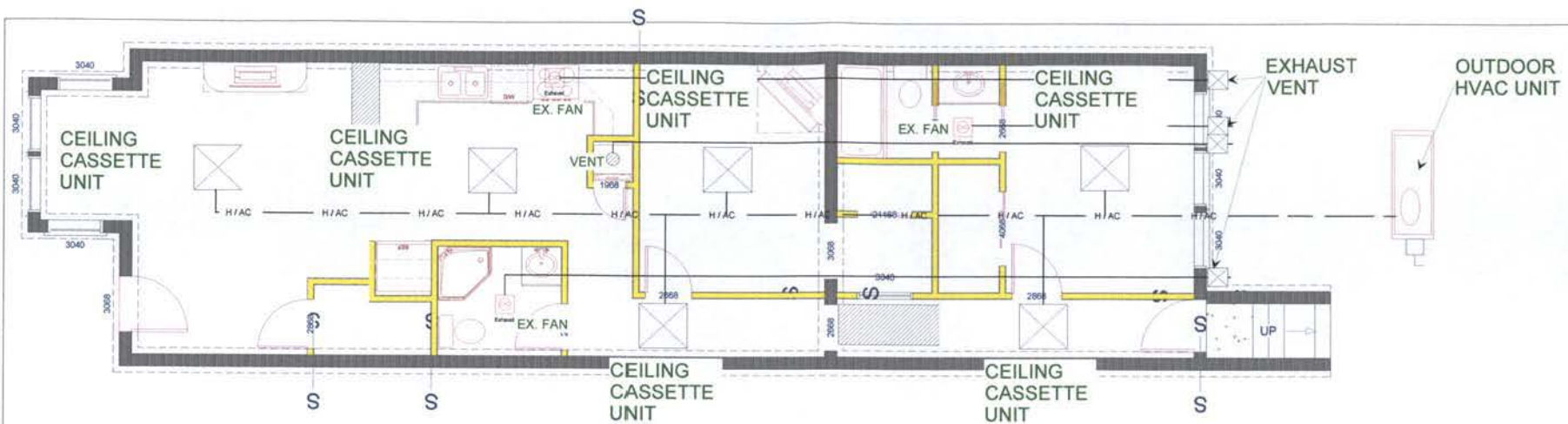
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2011 AUG
SHEET TITLE
LEGEND & RISER

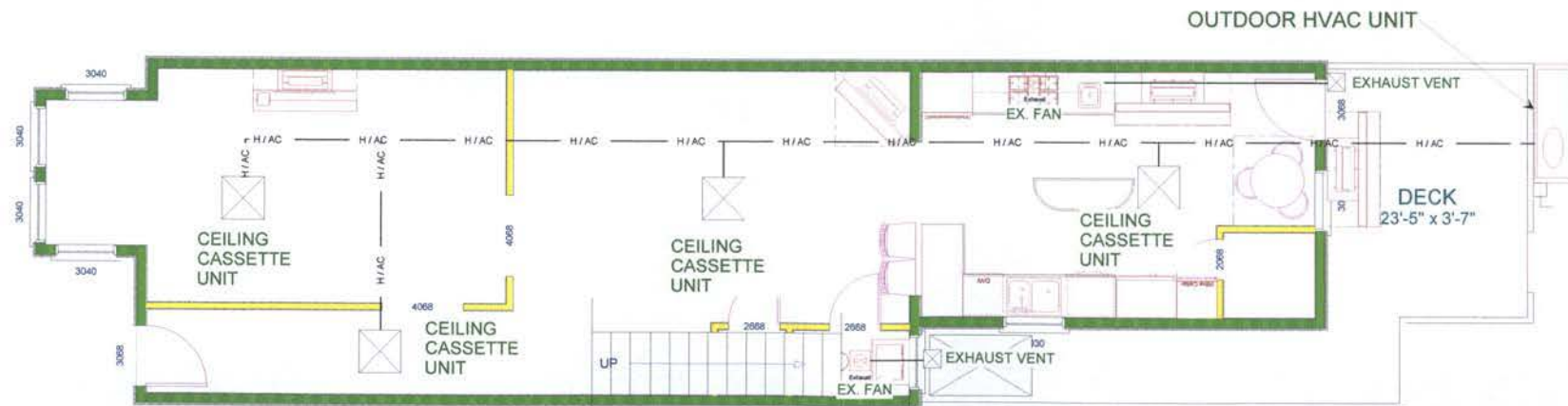


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NEW BASEMENT FLOOR MECHANICAL PLAN
1036 sq ft



NEW FIRST FLOOR MECHANICAL PLAN
950 sq ft



Project ARNOLD YOUNG RESIDENCE
Name BASEMENT RENOVATION & ADDITION
Company Street 1706 10TH STREET
City WASHINGTON, DC

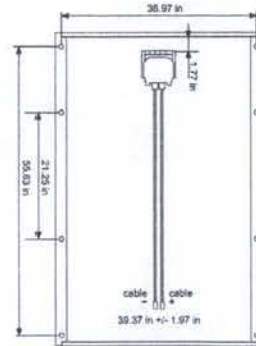
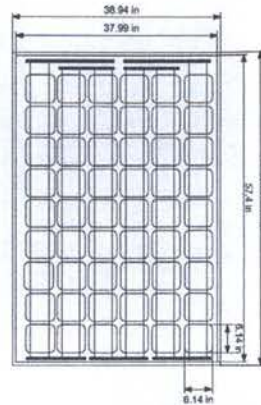
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Technical Data

Photovoltaic Modules		
Product name	SPV 200 SMAU-1	SPV 210 SMAU-1
Schüco article number	232 935	232 936
Electrical specifications		
STC Rated output (P _{mppt})	200 Wp	210 Wp
PTC Rated output (P _{mppt})	178.4 Wp	187.3 Wp
Output tolerance STC (Δ P _{mppt})	-3 %/+3 %	-3 %/+3 %
Warranted power output STC (P _{mppt} min)	200 Wp	210 Wp
Rated voltage (V _{mppt} *)	25.38 V	26.30 V
Rated current (I _{mppt} *)	7.89 A	7.98 A
Open circuit voltage (V _{oc} *)	33.53 V	33.68 V
Short circuit current (I _{sc} *)	8.24 A	8.35 A
Module efficiency	14.2 %	14.9 %
Temperature coefficient α (P _{mppt})	-0.50 %/K	-0.50 %/K
Temperature coefficient β (I _{mppt})	+0.03 %/K	+0.03 %/K
Temperature coefficient χ (V _{oc})	-0.33 %/K	-0.33 %/K
Temperature coefficient δ (I _{sc})	+0.03 %/K	+0.03 %/K
Temperature coefficient ϵ (V _{mppt})	-0.33 %/K	-0.33 %/K
Normal Operating Cell Temperature (NOCT)	109.4° F	109.4° F
Maximum system voltage USA NEC	600 V	600 V
Maximum system voltage SCII	600 V	600 V
Max. series fuse rating	15 A	15 A
Cell Technology		
Cell type	monocrystalline	monocrystalline
Number of cells / cell arrangement	54 / 6 x 9	54 / 6 x 9
Cell dimension	6"	6"
Mechanical specifications		
Outer dimensions	58.3 x 38.9 x 1.87 in	58.3 x 38.9 x 1.9 in
Frame technology (if applicable)	Aluminum frame, black	Aluminum frame, black
Compound	Glass / EVA / Backsheet	Glass / EVA / Backsheet
Weight (module only)	37.9 lbs	37.9 lbs
Junction Box IP rating	IP 65	IP 65
Cable length / diameter (if applicable)	40 in $\pm$ 2 in / 4 mm ²	40 in $\pm$ 2 in / 4 mm ²
Connector type	Tyco Solarlok	Tyco Solarlok
Qualification and warranties		
Product standard	UL 1703	UL 1703
Extended product warranty	5 years	5 years
Output warranty of 90% performance P _{mppt} (STC)	12 years	12 years
Output warranty of 80% performance P _{mppt} (STC)	25 years	25 years
Miscellaneous		
Packing unit	2 modules	2 modules
Weight of packing unit	88 lbs	88 lbs

* Irradiance 1,000 W/m², air mass index 1.5, cell temperature 25° C

Schüco USA L.P.
schuco-usa.com



Schüco Canada Inc.
Structural Engineering Certification for SCHÜCO ezFlatroof 3.0 Mounting System 10-3128-03

SCHÜCO ezFlatroof 3.0 Mounting System

General Notes on Installation Chart and Usage

- Chart values are calculated in accordance with the Ontario Building Code 2006 (OBC) and National Building Code 2005 (NBC).
- Chart values are to be used in conjunction with Climatic Data for 1/50 Hourly Wind Pressure (q, kPa) for Ontario and Canada as per OBC (OBC Supplementary Standard SB-1, table 1.2) or NBC (Division B, Appendix C, table C-2).
- Charts are calculated based on the worst case load combination of wind load only, they are not further limited by snow loading requirements other than maximum limit indicated below.
- Chart values are not to be interpolated. For intermediate values, use next most conservative (lowest) value from the chart.
- Chart use limiting parameters:
 - Chart values are based on locations with flat, open terrain exposure, with a maximum average hill slope of 1 in 10.
 - Chart design maximums are:
 - mean roof height: 60m (196.9ft);
 - Se+St, 1/50 roof snow and rain load: 5.2kPa (108.3psf);
 - q, 1/50 hourly wind pressure: 1.0kPa (20.8psf); and
 - For installations where one or more limiting parameters are exceeded, refer to site specific engineering design and recommendations.
- Chart values are to be strictly used for the Premium ezFlatroof 3.0 Mounting System and designated hardware and fasteners.
- Chart values are based on a maximum individual panel area of 2.0m² (21.5 ft²). Required fastener resistance values for larger panel areas may be extrapolated linearly.
- Chart values are based on two (2) fasteners installed per bracket frame.
- Chart values do not take into consideration structural strength or integrity of installation substrate and structure to provide adequate fastener resistance or support the solar panel system. Installer is responsible for ensuring roof substrate and structure is of adequate condition and capacity.

SCHÜCO ezFlatroof 3.0™ Installation Charts

Mean Roof Height	Required fastener capacity (per fastener)		N (lbf)
	0.4kPa (8.3psf)	Hourly Wind Pressure 0.7kPa (14.8psf)	
0.0m (0.0ft)	686.3 (154.3)	1351.0 (303.7)	2015.7 (453.2)
10.0m (32.8ft)	686.3 (154.3)	1351.0 (303.7)	2015.7 (453.2)
15.0m (49.2ft)	792.8 (178.2)	1537.5 (345.7)	2282.1 (513.1)
20.0m (65.6ft)	876.1 (197.0)	1683.2 (378.4)	2490.3 (559.9)
25.0m (82.0ft)	945.5 (212.6)	1804.6 (405.7)	2663.7 (598.9)
30.0m (98.4ft)	1005.5 (228.1)	1909.6 (429.9)	2813.7 (632.6)
35.0m (114.8ft)	1058.7 (238.0)	2002.7 (450.2)	2946.7 (662.5)
40.0m (131.2ft)	1106.6 (248.8)	2086.6 (469.1)	3066.5 (689.4)
45.0m (147.6ft)	1150.4 (258.6)	2163.2 (486.3)	3176.1 (714.0)
50.0m (164.0ft)	1190.9 (267.7)	2234.0 (502.2)	3277.1 (736.8)
55.0m (180.4ft)	1228.5 (278.2)	2299.8 (517.0)	3371.2 (757.9)
60.0m (196.9ft)	1263.7 (284.1)	2361.5 (530.9)	3459.3 (777.7)

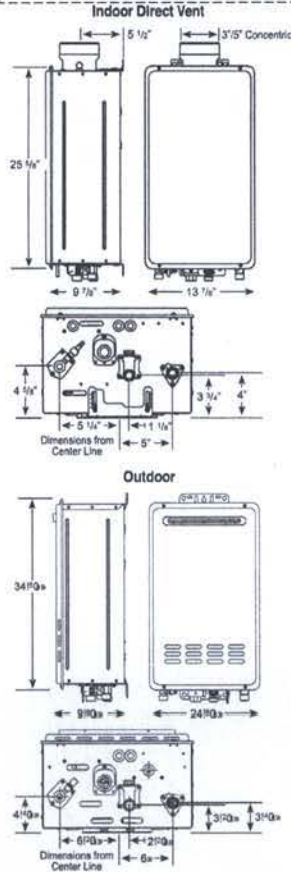
Values are based on two (2) fasteners installed per bracket.
Values are per fastener, based on a maximum panel area of 2.0m²

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 301-352-4335 PH. 301-352-4330 FAX. TN.THOMAS@PRODIGY.NET
 Project: ARNOLD YOUNG RESIDENCE
 Name: BASEMENT RENOVATION & ADDITION
 Company: ARNOLD YOUNG
 Street: 1706 10TH STREET
 City: WASHINGTON, DC
 SHEET NO: M3
 TITLE: SOLAR PANEL DETAILS
 DATE: 2011 AUG - 17
 RECEIVED: 2011 AUG - 17

95 TANKLESS SERIES

Specifications

DESCRIPTION		FEATURES					ROUGHING IN DIMENSIONS (SHOWN IN INCHES)						ENERGY INFO		
MODEL NUMBER	GAS INPUT BTU/Hr	TYPE	TEMP. RANGE	WATER FLOW RATE			CONNECTION		HEIGHT	WIDTH	DEPTH	VENT DIAMETER (INCHES)	SHIP WEIGHT (LBS.)	ENERGY FACTOR	D.O.E. ANNUAL DIS. COEFF. NAT'L P.
				GPM @ 70° F. MIN. MAX.	GPM @ 80° F. MIN. MAX.	GPM @ 90° F. MIN. MAX.	WATER	GAS							
RHEEM TANKLESS WATER HEATERS FOR 3 BATHROOM HOMES															
RTG-95DVN*	11,000-199,900	Indoor <i>Partial vent</i>	85° to 140° F.*	4.3	7.4	9.5	3/4"	3/4"	25-5/8"	13-7/8"	9-7/8"	3 by 5 CONCENTRIC	54	.82	\$223/\$374
RTG-95XN*	11,000-199,900	Outdoor	85° to 140° F.*	4.3	7.4	9.5	3/4"	3/4"	23-5/8"	13-7/8"	8-7/8"	N/A	54	.82	\$223/\$374



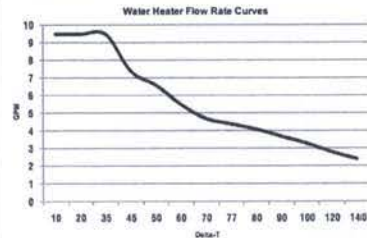
All models are available in Natural Gas and Propane (LP). For Propane replace the N with P when ordering.

- Factory set maximum temperature is 120° F. See Use and Care Manual for setting.
- Consult factory for information on sizing the application.
- Vent Termination Kits are required for Direct Vent models. Contact your distributor for details.

Proper gas pressure must be ensured to supply tankless gas water heaters - up to 199,900 BTU for RTG-95 models. (Consult your gas supplier)

Model Number	Temperature Rise (* F)							
	35°	45°	50°	60°	70°	77°	80°	100°
RTG-95 Water Flow (GPM)	9.5	7.4	6.6	5.5	4.7	4.3	4.1	3.7

Above estimates are for sizing purposes only.



*COMMERCIAL OPERATION AVAILABLE WITH CONVERSION KITS:
RTG20214A FOR RTG-95DVN **RTG20214C** FOR RTG-95XN
RTG20214B FOR RTG-95DVP **RTG20214D** FOR RTG-95XP
 Temperature range for commercial: 85° to 185° F.

These units are designed to meet or exceed ANSI (American National Standards Institute) requirements and have been tested according to D.O.E. test procedures and meet or exceed the energy efficiency requirements of NAECA, ASHRAE standard 90, ICC Code and all state energy efficiency performance criteria for energy consuming appliances.

Before purchasing this appliance, read important energy cost and efficiency information available from your supplier.

In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice.

Rheem Water Heating and Heating & Cooling Products
 101 Bell Road • Montgomery, AL 36117-4305
 1-866-720-2076 • www.rheem.com

Rheem Canada Ltd./Ltée • Water Heater Division
 125 Edgeware Road, Unit 1, Brampton, Ontario L6Y 0P5

Printed in U.S.A. 02/10 WP Form No. 101-50-95 Rev. 1

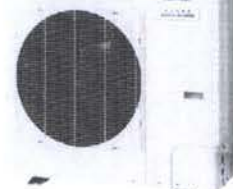
Super Digital Inverter Cassette

TOSHIBA
Carrier

- Digital inverter compressor technology (18-42K BTUH)
- Up to 21.0 SEER, up to 11.9 HSPF
- Line length up to 245 ft.
- Optional fresh air intake
- Built-in condensate pump
- Independent lower control (fixed or swing)
- Optional wired or wireless controller
- Power saving mode
- Quiet operation
- Diagnostics
- Low-ambient cooling down to 5° F
- Filter maintenance indicator
- Clean mode



SUPER
DIGITAL INVERTER



System	Size	Indoor/Outdoor Split System Capacity (BTU/h)				
		18	24	30	36	48
Performance	Outdoor Model	RAV-S180AT2-UL	RAV-S240AT2-UL	RAV-S300AT2-UL	RAV-S360AT2-UL	RAV-S480AT2-UL
	Indoor Model	RAV-S180UT-UL	RAV-S240UT-UL	RAV-S300UT-UL	RAV-S360UT-UL	RAV-S480UT-UL
Capacity	Cooling Rated Capacity (BTU/h)	18,000	24,000	30,000	36,000	48,000
	Cooling Cap. Range Min. - Max (BTU/h)	3,800 - 21,600	5,610 - 28,800	10,410 - 36,480	11,850 - 41,800	10,950 - 48,500
SEER/EER	SEER/EER	20.5/11.0	20.5/11.0	21.0/11.0	21.2/11.0	21.2/11.0
	Heating Rated Capacity (BTU/h)	18,000	24,000	30,000	36,000	48,000
Heating Cap. Range Min. - Max (BTU/h)	Heating Cap. Range Min. - Max (BTU/h)	3,300 - 21,000	4,100 - 28,800	8,900 - 38,100	8,940 - 40,300	8,400 - 41,500
	HSPF	11.5	11.5	11.5	11.5	11.5
Control	Wireless (°C, °F, Convertible)	Optional - Dedicated °F or °C				
	Wired (°C, °F, Convertible)	Optional - Convertible				
Operating Range	Cooling Outdoor Min. - Max (°F)	55 - 115 (5 with wind buffer)				
	Heating Outdoor Min. - Max (°F)	-4 - 59				
Range	Cooling Indoor DB Min. - Max (°F)	59 - 85				
	Heating Indoor DB Min. - Max (°F)	59 - 82				
Piping	Total Piping Length ft.	165				
	Piping L/R ft.	100				
Voltage	Voltage	208/230-1-40				
	Power Supply	Indoor unit powered from outdoor unit				
Electrical	Outdoor - MCA	35				
	Outdoor - Fuse Rating (MOCP)	30				
Outdoor	Dimensions (W x H x D) in.	30 1/2 x 21 1/2 x 11 1/2	35 1/2 x 25 1/2 x 12 1/2	35 1/2 x 30 1/2 x 12 1/2	35 1/2 x 35 1/2 x 12 1/2	35 1/2 x 45 1/2 x 12 1/2
	Net Weight (lbs.)	95	144	165	211	322
Indoor	Sound Pressure dBA (1/16")	48 / 46	49 / 50	50 / 51	51 / 52	52 / 53
	Unit Dimensions (W x H x D) in.	33 1/2 x 10 1/2 x 33 1/2	37 1/2 x 12 1/2 x 37 1/2	37 1/2 x 12 1/2 x 37 1/2	37 1/2 x 12 1/2 x 37 1/2	37 1/2 x 12 1/2 x 37 1/2
Indoor	Grid Dimensions (W x H x D) in.	33 1/2 x 10 1/2 x 33 1/2	37 1/2 x 12 1/2 x 37 1/2	37 1/2 x 12 1/2 x 37 1/2	37 1/2 x 12 1/2 x 37 1/2	37 1/2 x 12 1/2 x 37 1/2
	Grid Net Weight (lbs.)	44	10	10	10	10
Indoor	Number of Fan Speeds	3	3	3	3	3
	Airflow (L/MIN) CFM	400 / 500 / 600	400 / 480 / 610	610 / 750 / 1050	610 / 750 / 1050	610 / 750 / 1050
	Sound Pressure dBA (1/16")	32 / 33 / 35	32 / 33 / 35	35 / 40 / 46	38 / 43 / 47	38 / 43 / 47
	Sound Pressure dBA (1/16")	32 / 33 / 35	32 / 33 / 35	35 / 40 / 46	38 / 43 / 47	38 / 43 / 47

Per standard testing as described by AHRI270-95

*Condensing unit above or below indoor unit

SHEET NO: **M4**
 SHEET TITLE: **TANKLESS WH & HVAC UNIT-1**

Project: **ARNOLD YOUNG RESIDENCE**
 Name: **BASEMENT RENOVATION**
 Company: **MINOZ OF RENOVATION**
 Street: **1706 10TH STREET NW**
 City: **WASHINGTON, DC**

DESIGN BY:
 TN THOMAS DESIGN SERVICES, INC.
 6319 WOOD POINTE DRIVE, GLENN DALE, MARYLAND 20769
 301-352-4335 PH. 301-352-4330 FAX. TN.THOMAS@PRODIGY.NET



GENERAL DATA—RRRL- SERIES

NOMINAL SIZES 2-5 TONS [7.0-17.6 kW]

Model RRRL- Series	C036JK06(E/X)	C036JK08(E/X)	C036JK10(E/X)	C048CK09
Cooling Performance¹				
Gross Cooling Capacity (2nd Stage) Btu [kW]	36,800 [10.78]	36,800 [10.78]	36,800 [10.78]	48,500 [14.21]
SEER ²	16.3	16.3	16.3	15
EER (1st stage / 2nd stage)	13.4/12.3	13.4/12.3	13.4/12.3	12.7/11.5
AHRI Rated CFM (1st / 2nd stage) [L/s]	800/1200 [378/566]	800/1200 [378/566]	800/1200 [378/566]	1050/1600 [495/755]
AHRI Net Cooling Capacity (1st / 2nd stage) Btu [kW]	25,000/36,000 [7.32/10.55]	25,000/36,000 [7.32/10.55]	25,000/36,000 [7.32/10.55]	34,800/47,000 [10.2/13.77]
Net Sensible Capacity (1st / 2nd stage) Btu [kW]	18,470/27,280 [5.41/7.99]	18,470/27,280 [5.41/7.99]	18,470/27,280 [5.41/7.99]	24,820/34,480 [7.27/10.1]
Net Latent Capacity (1st / 2nd stage) Btu [kW]	6,530/8,720 [1.91/2.55]	6,530/8,720 [1.91/2.55]	6,530/8,720 [1.91/2.55]	9,980/12,520 [2.92/3.67]
Net System Power (1st / 2nd stage) [kW]	1.87/2.94	1.87/2.94	1.87/2.94	2.73/4.1
Heating Performance (Gas)³				
Heating Input Btu [kW] (1st / 2nd stage)	42,000/60,000 [12.31/17.58]	56,000/80,000 [16.41/23.44]	70,000/100,000 [20.51/29.3]	56,000/80,000 [16.41/23.44]
Heating Output Btu [kW] (1st / 2nd stage)	33,600/48,000 [9.84/14.06]	44,800/64,000 [13.13/18.75]	56,000/80,000 [16.41/23.44]	45,360/64,800 [13.29/18.99]
Temperature Rise Range °F [°C] (1st / 2nd stage)	15-45 [8.3-25] / 30-60 [16.7-33.3]	20-50 [11.1-27.8] / 40-70 [22.2-38.9]	35-65 [19.4-36.1] / 55-85 [30.6-47.2]	20-50 [11.1-27.8] / 40-70 [22.2-38.9]
AFUE (%) ⁴	80	80	80	80
Steady State Efficiency (%)	81	81	81	81
No. Burners	3	4	5	4
No. Stages	2	2	2	2
Gas Connection Pipe Size in. [mm]	0.5 [12.7]	0.5 [12.7]	0.5 [12.7]	0.5 [12.7]
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)⁵				
	76	76	76	78
Outdoor Coil—Fin Type				
Tube Type	Rifted	Rifted	Rifted	Rifted
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.23 [1.51]	16.23 [1.51]	16.23 [1.51]	16.23 [1.51]
Rows / FPI (FPCm)	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Indoor Coil—Fin Type				
Tube Type	Rifted	Rifted	Rifted	Rifted
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	7.39 [0.69]	7.39 [0.69]	7.39 [0.69]	7.39 [0.69]
Rows / FPI (FPCm)	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan—Type				
No. Used/Diameter in. [mm]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	2700 [1274]	2700 [1274]	2700 [1274]	3300 [1557]
No. Motors/HP	1 at 1/8 HP	1 at 1/8 HP	1 at 1/8 HP	1 at 1/8 HP
Motor RPM	850	850	850	850
Indoor Fan—Type				
No. Used/Diameter in. [mm]	FC Centrifugal 1/10x9 [254x229]	FC Centrifugal 1/10x9 [254x229]	FC Centrifugal 1/10x9 [254x229]	FC Centrifugal 1/10x9 [254x229]
Drive Type/No. Speeds	Direct/11	Direct/11	Direct/11	Direct/11
No. Motors	1	1	1	1
Motor HP	1/2	1/2	1/2	3/4
Motor RPM	1050	1050	1050	1050
Motor Frame Size	48	48	48	48
Filter—Type				
Furnished	Field Supplied	Field Supplied	Field Supplied	Field Supplied
(NO.) Size Recommended in. [mm x mm x mm]	(1)1x24x24 [25x61x610]	(1)1x24x24 [25x61x610]	(1)1x24x24 [25x61x610]	(1)1x24x24 [25x61x610]
Refrigerant Charge Oz. [g]	155.2 [4400]	155.2 [4400]	155.2 [4400]	169.8 [4809]
Weights				
Net Weight lbs. [kg]	552 [250]	557 [253]	557 [253]	549 [249]
Ship Weight lbs. [kg]	558 [253]	558 [253]	558 [253]	562 [255]

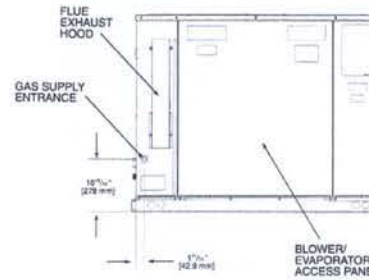
See Page 28 for Notes.

Designates Metric Conversions

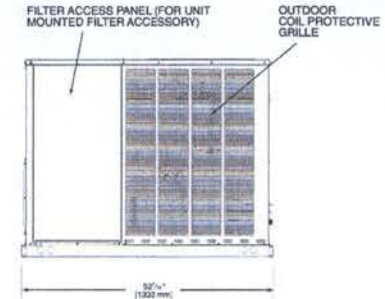
UNIT DIMENSIONS—RRNL-/RRPL-/RRRL- SERIES



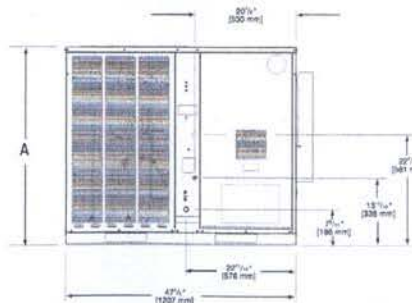
SIDE VIEW



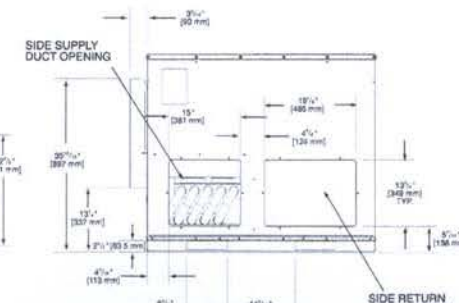
SIDE VIEW



FRONT VIEW



BACK VIEW



SHOWN WITH DUCT COVERS REMOVED.

Models: RRNL/RRPL	Model: RRRL	"A" Height
B024, B030, B036	B024	35 15/16"
B042, B048, B060/C060	B036, B048, B060	41"

[] Designates Metric Conversions

SHEET NO:

M5

SHEET TITLE:

HVAC DETAILS
& DATA

Project ARNOLD YOUNG RESIDENCE
Name BASEMENT RENOVATION &
Company ADDITION
Street 1706 10TH STREET
City WASHINGTON, DC

DESIGN BY:
TN THOMAS DESIGN SERVICES, INC.
6319 WOOD POINTE DRIVE, GLENN DALE, MARYLAND 20769
301-352-4335 PH. 301-352-4330 FAX TN.THOMAS@PRODIGY.NET



ACCESSORIES

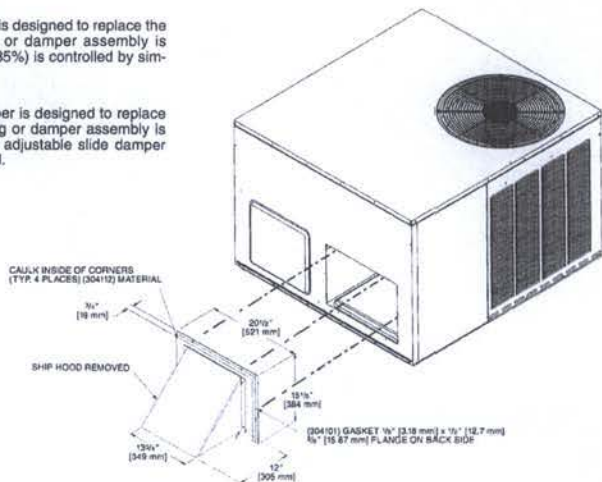
FRESH AIR DAMPER

RXRF-FAA1 (Fixed - 0-35%)

The 0-35% manual outside Air Damper is designed to replace the unit return air duct cover. No drilling or damper assembly is required. The amount of outside air (0-35%) is controlled by simply adjusting the side damper.

RXRF-FAB1 (Motorized - 0-35%)

The 0-35% motorized outside Air Damper is designed to replace the unit return air duct cover. No drilling or damper assembly is required. The control motor opens the adjustable slide damper when the unit blower motor is energized.



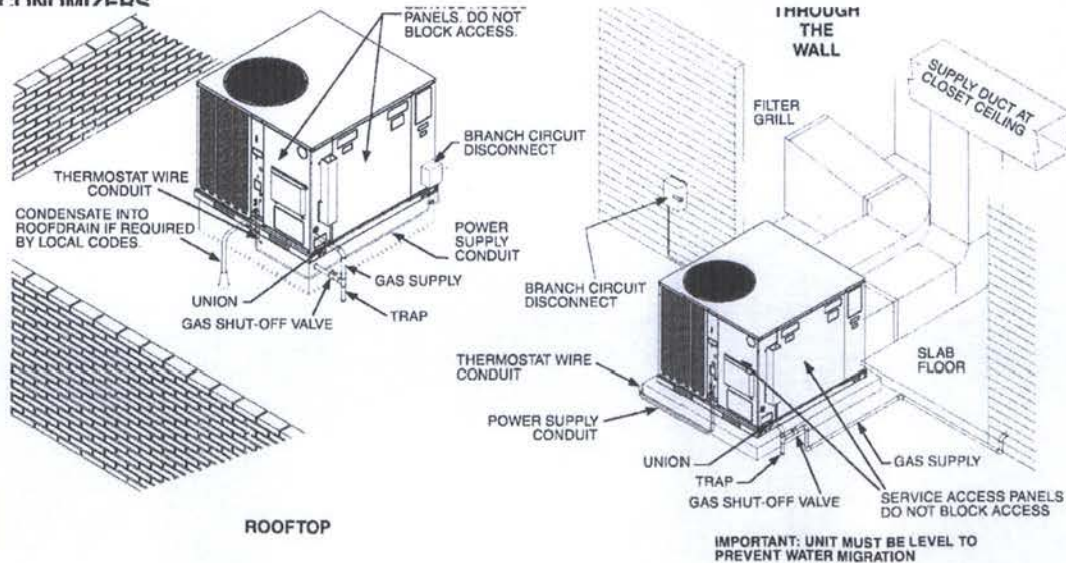
ELECTRICAL DATA—RRRL- SERIES



ELECTRICAL DATA—RRRL- SERIES							
Unit Information	Model	C084JK	C086CK	C088JK	C088CK	C084JK	C086CK
	Unit Operating Voltage Range	197-253	197-253	197-253	197-253	197-253	197-253
	Volts	208/230	208/230	208/230	208/230	208/230	208/230
	Minimum Circuit Ampacity	15/15	17/17	24/24	22/22	31/31	28/28
Compressor Motor	Minimum Overcurrent Protection Device Size	20/20	20/20	30/30	25/25	40/40	35/35
	Maximum Overcurrent Protection Device Size	20/20	25/25	40/40	30/30	50/50	45/45
Compressor Motor	No.	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	208/230	208/230
	Phase	1	3	1	3	1	3
	RPM	3450	3450	3450	3450	3450	3450
Condenser Motor	HP Compressor 1	2 5/8	4	4	5 1/4	5 1/4	7
	Amps (FLA, each)	10.3/10.3	11.2/11.2	16.7/16.7	13.5/13.5	21.2/21.2	17.6/17.6
	Amps (LRA, each)	52/52	58/58	82/82	88/88	96/96	123/123
	No.	1	1	1	1	1	1
Evaporator Fan	Volts	208/230	208/230	208/230	208/230	208/230	208/230
	Phase	1	1	1	1	1	1
	HP	1/6	1/6	1/6	1/3	1/3	1/3
	Amps (FLA, each)	0.8/0.8	0.8/0.8	0.8/0.8	1.5/1.5	1.5/1.5	2/2
Evaporator Fan	Amps (LRA, each)	1.5/1.5	1.5/1.5	1.5/1.5	3/3	3/3	3.9/3.9
	No.	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	208/230	208/230
	Phase	1	1	1	1	1	1
Evaporator Fan	HP	1/3	1/2	1/2	3/4	3/4	1
	Amps (FLA, each)	1/1	2/2	2/2	3/3	4/4	4/4
	Amps (LRA, each)	0/0	0/0	0/0	0/0	0/0	0/0

1. Horsepower Per Compressor.
2. Amp Draw Per Motor. Multiply Value By Number of Motors to Determine Total Amps.

ECONOMIZERS



DESIGN BY:

TN THOMAS DESIGN SERVICES, INC.

6319 WOOD POINTE DRIVE, GLENN DALE, MARYLAND 20769
301-352-4335 PH. 301-352-4330 FAX. TN THOMAS@PRODIGY.NET

Project: ARNOLD YOUNG RESIDENCE
Name: BASEMENT RENOVATION & ADDITION

Company:

Street 1706 10TH STREET
City WASHINGTON, DC

SHEET NO:

M6

SHEET TITLE:

HVAC DETAILS
& DATA



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