MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION
STAFF REPORT

Address:	12 Valley View Ave., Takoma Park	**Meeting Date:**	1/19/2022
Resource:	Non-Contributing Resource **Takoma Park Historic District**	**Report Date:**	1/12/2022
Applicant:	Adam Diamond	**Public Notice:**	1/5/2022
Review:	HAWP	**Tax Credit:**	n/a
Permit No.:	978014	**Staff:**	Dan Bruechert
Proposal:	Fenestration Alteration and Rear Porch Enclosure		

STAFF RECOMMENDATION

Staff recommends the HPC **approve** the HAWP.

ARCHITECTURAL DESCRIPTION

SIGNIFICANCE: Non-Contributing Resource to the Takoma Park Historic District
STYLE: Colonial Revival
DATE: 1933

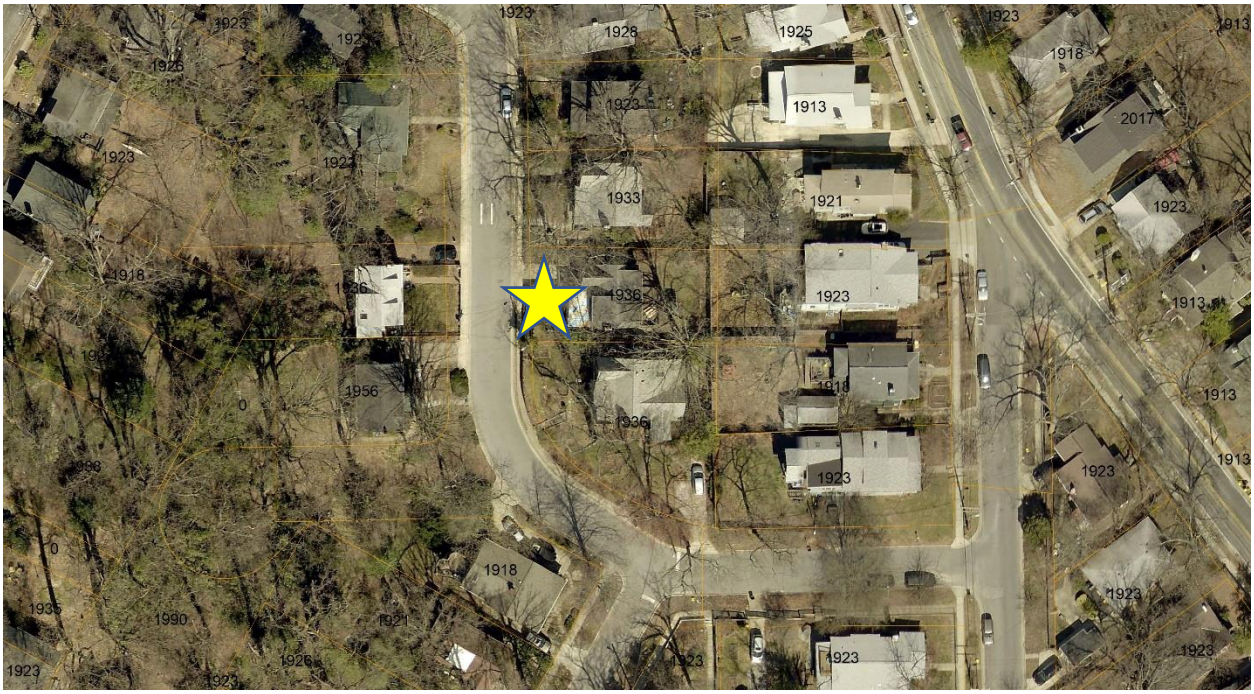


Figure 1: 12 Valley View Ave., Takoma Park

PROPOSAL

The applicant proposes to replace the existing garage door and to enclose the rear screened-in porch.

APPLICABLE GUIDELINES

When reviewing alterations and new construction within the Takoma Park Historic District several documents are to be utilized as guidelines to assist the Commission in developing their decision. These documents include the historic preservation review guidelines in the approved and adopted amendment for the *Takoma Park Historic District (Guidelines), Montgomery County Code Chapter 24A (Chapter 24A*), and *the Secretary of the Interior's Standards for Rehabilitation (Standards)*. The pertinent information in these documents is outlined below.

Takoma Park Historic District Guidelines

There are two very general, broad planning and design concepts which apply to all categories. These are:

> The design review emphasis will be restricted to changes that are at all visible from the public right-of-way, irrespective of landscaping or vegetation (it is expected that the majority of new additions will be reviewed for their impact on the overall district), and,
>
> The importance of assuring that additions and other changes to existing structures act to reinforce and continue existing streetscape, landscape, and building patterns rather than to impair the character of the district.

Non-Contributing/Out-of-Period Resources should receive the most lenient level of design review. Most alterations and additions to Non-Contributing/Out-of-Period Resources should be approved as a matter of course. The only exceptions would be major additions and alterations to the scale and massing of Non-Contributing/Out-of-Period Resources which affect the surrounding streetscape and/or landscape and could impair character of the district as a whole.

Montgomery County Code; Chapter 24A-8

(a) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to ensure conformity with the purposes and requirements of this chapter, if it finds that:
   (1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
   (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter; or

Secretary of the Interior's Standards for Rehabilitation:

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportions, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

STAFF DISCUSSION

The subject property is a 1 ½ story Colonial Revival house. The applicants propose to replace the front-facing, basement-level garage door and to enclose the screened-in porch at the rear of the house.

Garage Door Replacement
The existing garage door is a wood and glass roll-up door. It is not historically or architecturally significant. The applicant proposes to remove this door and install a pair of bi-fold aluminum and glass doors. The doors will fit the existing opening.

Staff finds that removing the existing door will not impact the character of the house or the surrounding district. Staff finds proposed door changes the character of the garage opening from a traditional vehicular opening to a more residential character. However, because this resource is Non-Contributing, the question is, does this change impact the scale or size of the resource and negatively impact the character of the surrounding district? Staff finds it does not impact the character of the district and therefore, recommends approval of the proposed doors.

Screened-in Porch Enclosure
At the rear of the house, there is a screened-in porch with a gable roof. The applicant proposes to enclose the existing screened-in porch in matching dimensions to enlarge the kitchen. The exterior of the enclosed porch will be covered in fiber cement siding to match the treatment of the rear second-story addition. There will be a single, fixed window on the rear elevation of the enclosed rear addition.

The screened-in porch is not at all visible from the public right-of-way. Staff finds the change to the enclosed porch is compatible with the design of the house and is consistent with the requirements of 24A-8(b)(2) and Standards 2, 9, and 10. Additionally, because the change is not visible from the right-of-way, the *Design Guidelines* state the proposal should be approved as a matter of course. Staff recommends the HPC approve the rear porch enclosure.

STAFF RECOMMENDATION

Staff recommends that the Commission **approve** the HAWP application; under the Criteria for Issuance in Chapter 24A-8(b)(2) and the *Takoma Park Historic District Guidelines*, having found that the proposal will not substantially alter the exterior features of the historic resource and is compatible in character with the district and the purposes of Chapter 24A;

and with the *Secretary of the Interior's Standards for Rehabilitation* #2, 9, and 10;

and with the general condition that the applicant shall present an electronic set of drawings, if applicable, to Historic Preservation Commission (HPC) staff for review and stamping prior to submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that final project design details, not specifically delineated by the Commission, shall be approved by HPC staff or brought back to the Commission as a revised HAWP application at staff's discretion;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make **any alterations** to the approved plans. Once the work is completed the applicant will contact the staff person assigned to this application at 301-563-3400 or dan.bruechert@montgomeryplanning.org to schedule a follow-up site visit.

FOR STAFF ONLY:
HAWP# 978014
DATE ASSIGNED_____

APPLICATION FOR HISTORIC AREA WORK PERMIT

HISTORIC PRESERVATION COMMISSION
301.563.3400

APPLICANT:

Name: Adam Diamond
E-mail: adamvdiamond@gmail.com
Address: 12 Valley View Ave
City: Takoma Park Zip: 20912
Daytime Phone: 301.579.4563
Tax Account No.: 01062177

AGENT/CONTACT (if applicable):

Name: Lynnette Brunson
E-mail: lynnetteb@brunsondesigns.org
Address: 10739 Tucker Street, 260
City: Beltsville Zip: 20705
Daytime Phone: 301.579.4563
Contractor Registration No.: _____

LOCATION OF BUILDING/PREMISE: MIHP # of Historic Property_____

Is the Property Located within an Historic District? __Yes/District Name Takoma Park Historic District
__No/Individual Site Name_____

Is there an Historic Preservation/Land Trust/Environmental Easement on the Property? If YES, include a map of the easement, and documentation from the Easement Holder supporting this application.

Are other Planning and/or Hearing Examiner Approvals /Reviews Required as part of this Application? (Conditional Use, Variance, Record Plat, etc.?) If YES, include information on these reviews as supplemental information.

Building Number: 12
Street: Valley View Avenue
Town/City: Takoma Park
Nearest Cross Street: Maple Avenue
Lot: 59
Block: _____
Subdivision: Harry Hobarts
Parcel: 12

TYPE OF WORK PROPOSED: See the checklist on Page 4 to verify that all supporting items for proposed work are submitted with this application. Incomplete Applications will not be accepted for review. Check all that apply:

- ☐ New Construction
- ☐ Addition
- ☐ Demolition
- ☐ Grading/Excavation
- ☐ Deck/Porch
- ☐ Fence
- ☐ Hardscape/Landscape
- ☐ Roof
- ☐ Shed/Garage/Accessory Structure
- ☐ Solar
- ☐ Tree removal/planting
- ☐ Window/Door
- ☑ Other: Interior Alterations

I hereby certify that I have the authority to make the foregoing application, that the application is correct and accurate and that the construction will comply with plans reviewed and approved by all necessary agencies and hereby acknowledge and accept this to be a condition for the issuance of this permit.

Lynnette Brunson
Signature of owner or authorized agent

12.20.21
Date

Description of Property: Please describe the building and surrounding environment. Include information on significant structures, landscape features, or other significant features of the property:

The property is located above the street level approximately 8'. The building is a 1 1/2 story brick and frame structure. The building has a front facing garage that is approximately 2' above street level. A sloped concrete driveway leads you to the garage with concrete retaining walls on each side. The front yard is heavily landscaped with bushes and trees that will remain.

Description of Work Proposed: Please give an overview of the work to be undertaken:

1. CONVERT/ENCLOSE EXISTING SCREEN PORCH AT REAR OF PROPERTY
2. REDESIGN EXISTING KITCHEN LAYOUT AND INCORPORATE WITH SCREEN PORCH ENCLOSURE (INTERIOR ALTERATIONS)
3. GARAGE CONVERSION INTO LIVING SPACE. (NOTE: GARAGE DOOR WILL CHANGE TO FOLDING GLASS DOOR)

Adjacent and Confronting Properties:

Takoma Park, MD 20912

37 Philadelphia Avenue

14 Valley View Avenue

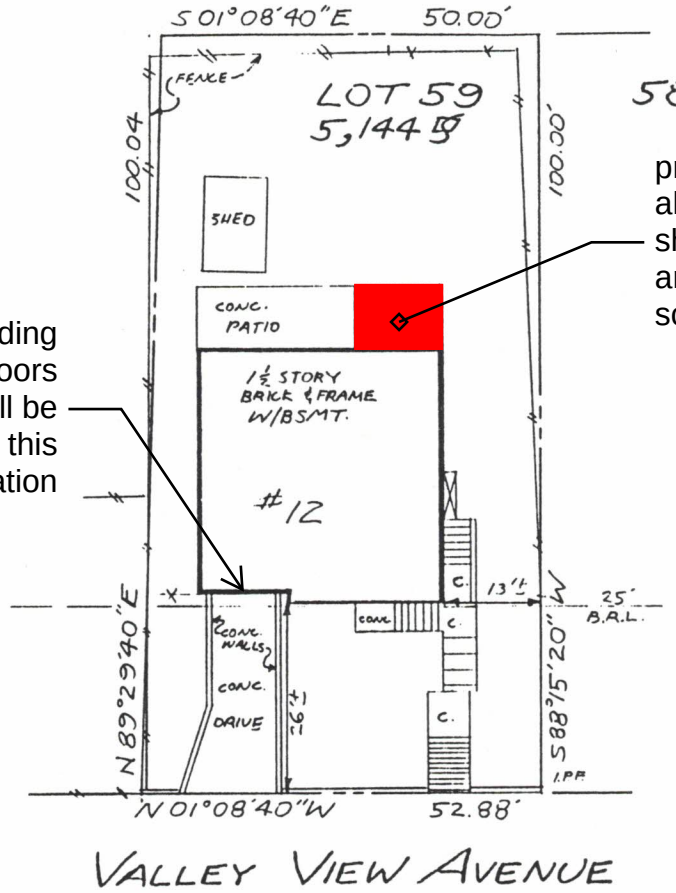
10 Valley View Avenue

5 Valley View Avenue

The plat is of benefit to a consumer only insofar as it is required by a lender or a title insurance company or its agent in connection with contemplated transfer, financing or re-financing. The plat is not to be relied upon for the establishment or location of fences, garages, buildings, or other existing or future improvements. The plat does not provide for the accurate identification of property boundary lines, but such identification may not be required for the transfer of title or securing financing or re-financing.

NOTE: The lot shown hereon does not lie within the limits of the 100 year flood plain as shown on FIRM Panel No. 200
Date of Map: 8-5-91
Flood Zone: "C"

NOTE: No property corners found or set unless otherwise noted.



proposed alteration work shall be in this area of existing screen porch

new folding glass doors shall be located at this location

STATE OF MARYLAND
MICHAEL JOHN BAZIS
NO. 10956
REGISTERED
PROFESSIONAL LAND SURVEYOR

LOCATION DRAWING
LOT 59
HARRY HOBARTS SUBDIVISION
TAKOMA PARK
MONTGOMERY COUNTY, MD.

THIS SURVEY IS FOR TITLE PURPOSES ONLY

SURVEYOR'S CERTIFICATE

I hereby certify that the property delineated hereon is in accordance with the Plat of Subdivision and/or deed of record, that the improvements were located by accepted field practices and include permanent visible structures and apparent encroachments, if any. This Plat is not for determining property lines or for construction of improvements, but prepared for exclusive use of present owners of property and also those who purchase, mortgage, or guarantee the title thereto, within six months from date hereof, and as to them I warrant the accuracy of this Plat.

Michael J. Bazis RPLS #10956

JOB # 95.1429 H	DATE 10-19-95	R.C. KELLY & ASSOCIATES, INC.
FIELD W.P.	DRAFT WCB	ENGINEERS & SURVEYORS
	P.B. 6 P# 512	10111 COLESVILLE ROAD, SUITE 133
	SCALE: 1" = 20'	SILVER SPRING, MARYLAND 20901
		(301) 593-8005
		FAX: (301) 681-7216

THE DIAMOND RESIDENCE

12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

PROJECT INFO:

SCOPE OF WORK AREA SF: BSMT: 318.77, 1ST: 157.62
GFA: EX: 1856.60 PROP: 2172.54
NUMBER OF STORIES ABOVE GRADE:
EXISTING: 1 1/2 STORIES PROPOSED: 1 1/2 STORIES
BASEMENT: YES
1ST FL: YES
ATTIC FL: YES
EXISTING BLDG HT = 28.7' PROPOSED = 28.7'
STRUCTURAL FRAMING SYSTEM: WOOD STUDS AT WALLS ABOVE GRADE,CMU AT FOUNDATION/BEARING WALLS (8" THK, 8' HT)
USE GROUP: R-3 **ZONE:** R-3
LOT: 59
LOT SIZE: 5,144 SF
SPRINKLERED: NO
SMOKE DETECTORS: HARDWIRED
GAS FUEL: YES (CO DETECTORS PROVIDED)
FIRE RATING: 0
EXISTING UNITS: 1 **PROPOSED UNITS:** 1
CONSTRUCTION TYPE: V-A
INSULATION:
EXT. WALLS: R20 INT + R5 CONT EXT
FLOOR: R30
CEILING: R49

LOCAL DESIGN LOAD CRITIA

WIND SPEED: 115 MPH
FROST DEPTH: 30in.
EARTHQUAKE: AT SHORT PERIODS / 0.16 AT 1 SEC PERIOD / .053
SEISMIC DESIGN: B
WEATHERING FOR CONCRETE: SEVERE
TERMITE: MODERATE TO HEAVY
DECAY: SLIGHT TO MODERATE
ICE SHEILD UNDERLAYMENT: YES
FLOOD HAZARDS: 3/5/1990
WINTER DESIGN: 15 D/F ; 9 D/C
AIR FREEZING: LESS THAN 1500 D/F ; 815 D/F
MEAN ANNUAL TEMP: 50 D/F ; 10 D/F

LOCATION MAP

BUILDING CODES

2018 International Building Code ER 31-19
Chapter 8 County Building Code
2018 International Building Code
2018 International Existing Building Code
Maryland Accessibility Code
2015 NFPA Fire Code
2015 NFPA 101 Life Safety Code
2012 International Green Construction Code
2015 IBC Amendments
2018 International Energy Conservation Code (IECC)
2018 International Mechanical Code (IMC)
Montgomery County Code Chapter 8 (Mechanical)
Montgomery County Code Chapter 17 (Electrical)
NFPA 70 (National Electric Code)
Chapter 35 of IBC-2018 Referenced Standards

SCOPE OF WORK

1. CONVERT/ENCLOSE EXISTING SCREEN PORCH AT REAR OF PROPERTY
2. REDESIGN EXISTING KITCHEN LAYOUT AND INCORPORATE WITH SCREEN PORCH ENCLOSURE (INTERIOR ALTERATIONS)
3. GARAGE CONVERSION INTO LIVING SPACE

INDEX

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

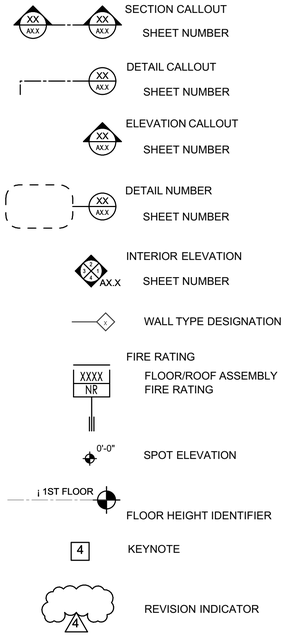
The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Cover Sheet

Drawn by LB Date 12.06.21
Checked by . Date

T1

GRAPHIC SYMBOLS



ABBREVIATIONS

A

AB	Anchor Bolt
ADD	Addendrum
ADJ	Adjacent
AFF	Above Finished Floor
AGGR	Aggregate
ALUM	Aluminum
ALT	Alternate
ANOD	Anodized
APPROX	Approximate
ARCH	Architectural

B

BLK'G	Blocking
B.M.	Bench Mark
BD	Board
BF	Backface
BL	Building Line
BLDG	Beam
BM	Bearing
BRG	Building Restriction Line
BRL	Bottom
BTM	Between
BTWN	

C

CEM	Cement
CIP	Cast In Place
CJ	Control Joint
CNJT	CONSTuction Joint
CL	Center Line
CLG	Ceiling
CLR	Clear
CMU	Concrete Masonry Unit
COL	Column
CONC	Concrete
CONN	Connection
CONST	CONSTuction
CONT	Continuous
COORD	Coordinate
CORR	Corrugated
CR	Cold Rolled
CSK	Countersunk
CTD	Centered
CTR	Center

D

D	Depth
DTLS	Details
STL	Detail
DIA	Diameter
DIM	Dimension
DL	Dead Load
DN	Down
DS	Down Spout
DWGS	Drawings
DWLS	Dowels

E

EA	Each
EJ	Expansion Joint
EL	Elevation
ELEV	Elevation
EMBDMT	Embedment
EOS	Edge of Slab
EPOXY'D	Epoxyed
EQ	Equal
EQUIP	Equipment
EW	Each Wat
EXIST	Existing
EXP BLT	Expansion Bolt
EXT	Exterior
ETR	Existing to remain

F

FD	Floor Drain
FDN	Foundation
FF	Finish Floor
FHC	Fire Hose Cabinet
FIN	Finish
FLR	Floor
F.R.	Fire Rated
FT	Foot
FTG	Footing
FV	Field Verify

G

GA	Gauge
GALV	Galvanized
GB	Grade Beam
GEN	General
GI	Galvanized Iron
GLS	Glass
GMU	Glazed Masonry Unit
GND	Ground
GR	Grade
GSM	Galvinized Sheet Metal
GYP BD	Gypsum Board

H

H	High
HDW	Hardware
HDR	Header
HORIZ	Horizontal
HP	High Point
HR	Hour
HT	Height
HWD	Hardwood

I

IBC	International Building Code
ID	Inside Diameter
INDO	Information
INSUL	Insulation

J

K

L

LDGR	Ledger
LG	Long
LOC	Location
LP	Low Point
LSL	Laminated Strand Lumber
LT	Light
LWC	Lightweight Concrete

M

MANUF	Manufacturer
MAS	Masonry
MATL	Material
MAX	Maximum
MDO	Medium Density Overlay
MDF	Medium Density Fiber
MECH	Mechanical
MEMB	Membrane
MEP	Mechanical, Electircal and Plumbing
MFG	Manufacturer
MIL	Thickness
MIN	Minimum
MISC	Miscellaneous
MO	Masonry Opening
MOD	Modified
MTL	Metal

N

N/A	Not Available/Applicable
NEC	Necessary
NIC	Not in Contract
NOM	Nominal
NTS	Not to Scale
NWC	Normal Weight Concrete

O

OA	Over All
OC	On Center
OD	Outside Diam.
O.D.	Overflow Drain
OH	Opposite Hand
OPNG	Opening
OPP	Opposite

P

PERF	Perforated
P.L.	Property Line
PL	Plate
PLYWD	Plywood
PR	Pair
PREFAB	Prefabricated
PREP	Prepare
PSF	Pounds per Square Foot
PSI	Pounds per Square Inch
PT	Point
PTD	Painted
P.T.	Pressured Treated

R

R	Riser
RAD	Radius
RCP	Reflected Ceiling Plan
RD	Roof Drain
REBAR	Reference
REF	Refurbish
REFURB	Reinforcing
REINF	Relocate/Relocated
RELOC	Require
REQD	Recessed Fire Valve
RFVC	Cabinet
RO	Rough Opening

S

S.A.B.	Sound Attenuation Board
SCHED	Schedule
SECT	Section
SF	Square Feet
SHT'G	Sheating
SHT	Sheet
SIM	Similar
SISTER'D	Sistered
SP	Structural Opening
SOG	Slab on Grade
SPEC	Specification
SQ	SSquare
S.S.	Stainless Steel
SSF	Solid Surface
STAGGER'D	Staggered
STD	Standard
STIDD	Stiffener
STIR	Stirrup
STC	Sound Transmission Class
STL	Steel
STRUCT	Structural
SYM	Symmetrical
SYS	System

T

T	Tread
TAPER'D	Tapered
TB	Towel Bar
T&B	Top and Bottom
T&G	Tongue and Groove
THK	Thick
THRU	Through
TJI'S	Trus Joist I Joist
TO	Top of
TOB	Top of Beam
TOC	Top of Concrete
TOCB	Top of Curb
TOG	Top of Footing
TOM	Top of Mullion
TOS	Top of Slab
TOSTL	Top of Steel
TP	Toilet Paper Holder
TR	Towel Ring
TW	Top of Wall
TYP	Typical

U

U/C	Under Counter
U/G	Underground
U.L.	Underwriters Laboratory
U.N.O.	Unless Noted Otherwise
UP, NS	Unprotected, Non Sprinklered

V

VAR	Varies
VERT	Vertical
V.I.F.	Verify In Field

W

W/	With
W/O	Without
W	Width
WP	Waterproof(ing)
WD	Wood
WF	Wide Flange
WL	Wind Load
WP	Work Point
WP0	Work Point Point of Origin
WP1	Work Point - Numbered
W.R.	Weather/Water Resistant
WWF	Welded Wire Fabric

GENERAL NOTES

1. ALL WORK IS TO BE DONE IN CONFORMANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
2. CONTRACTOR SHALL CONFORM TO ALL O.S.H.A. REQUIREMENTS
3. CONTRACTOR TO VISIT SITE AND COMPLETELY FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS PRIOR TO EXECUTION OF ANY CONSTRUCTION, CONTACT DESIGNER PRIOR TO EXECUTING ANY WORK IN QUESTION.
4. CHECK ALL DIMENSIONS ON JOB AND FULLY VERIFY PRIOR TO EXECUTION. ALL WORK TO BE FULLY EXECUTED IN ACCORDANCE WITH ALL GOVERNING CODES AND REGULATIONS. ALL ELEVATIONS GIVEN ARE APPROXIMATE AND ARE GIVEN FOR "RELATIONAL" PURPOSES. CONTRACTOR SHALL ESTABLISH EXACT LEVELS PRIOR TO START OF WORK AND NOTIFY DESIGNER OF ANY SIGNIFICANT DISCREPANCIES. CONTRACTOR TO PROVIDE SHOP DRAWINGS, COLOR SCHEDULES AND SELECTIONS FOR APPROVAL BY DESIGNER PRIOR TO EXECUTION.
5. DEMOLITION: TO BE PROVIDED BY CONTRACTOR AS REQUIRED. COMPLETELY REMOVE ALL TRASH FROM SITE.
6. UTILITIES: COORDINATE AND PROVIDE AS PER DRAWINGS.
7. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS/ VENDOR DATA SUBMITTAL SCHEDULE TO DESIGNER FOR REVIEW AND APPROVAL WITHIN THIRTY (30) DAYS FROM COMMENCEMENT OF WORK. SUBMIT TWO (2) COPIES TO DESIGNER.
8. CONTRACTOR SHALL NOT SCALE DRAWINGS AND DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DRAWINGS SHALL BE REPORTED TO DESIGNER FOR CLARIFICATION PRIOR TO COMMENCEMENT OF WORK.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INCLUSION OF ALL WORK NECESSARY FOR A COMPLETE INSTALLATION WHETHER SUCH WORK IS OR IS NOT INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
10. ALL MANUFACTURED ITEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
11. WARRANTIES, GUARANTEES AND MANUFACTURER'S INSTRUCTIONS ON EQUIPMENT FURNISHED AND INSTALLED BY THE CONTRACTOR SHALL BE GIVEN TO THE OCCUPANT.
12. CONTRACTOR SHALL PROVIDE PROTECTION ON A DAILY BASIS FOR ALL WORK THAT PENETRATES THE EXISTING ROOF MATERIAL. CONTRACTOR MAY COVER ALL WORK UNTIL WATER/WEATHER PROOF UNTIL COMPLETION OF CONSTRUCTION.
13. ALL WOOD FRAMING EXPOSED TO THE WEATHER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA.
14. IN AREAS WHERE THE DRAWINGS DO NOT ADDRESS METHODOLOGY, THE CONTRACTOR SHALL BE BOUND TO PERFORM IN STRICT COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
15. IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE DRAWINGS, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE SHOWN OR NOTED.
16. THE DESIGNER WILL NOT BE RESPONSIBLE FOR AND WILL NOT HAVE CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE DESIGNER WILL NOT BE RESPONSIBLE FOR THE FAILURE OF THE CLIENT OR HIS CONTRACTORS, SUBCONTRACTORS, OR ANYONE PERFORMING ANY OF THE WORK, TO CARRY OUT THE WORK IN ACCORDANCE WITH THE APPROVED CONTRACT DOCUMENTS.
17. All CONCRETE DETAILS AND CONSTRUCTION ARE TO COMPLY WITH LATEST A.C.I. CODE AND LOCAL CODES
18. APPROVAL OF THESE DRAWINGS BY GOVERNING AUTHORITIES DOES NOT RELEASE THE CONTRACTOR FROM COMPLYING WITH ALL APPLICABLE CODES AND STANDARDS.
19. ALL NOTES ON THIS DRAWING APPLY FOR THE ENTIRE PROJECT WHETHER OR NOT REPEATED ON OTHER DRAWINGS.
20. WHERE NEW WORK IS TO BE DONE. CARE SHALL BE TAKEN TO PROTECT ALL EXISTING ADJACENT SURFACES AND AREAS FROM DAMAGE. ANY AREAS DAMAGED DURING CONSTRUCTION OR DEMOLITION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE CLIENT. THIS APPLIES PARTICULARLY TO ADJACENT SPACES, ROOF, AND OTHER EXTERIOR AREAS AND SURFACES.
21. THE OWNER WILL CONSIDER FORMAL REQUESTS FROM THE CONTRACTOR FOR SUBSTITUTION OF PRODUCTS, MATERIAL OR MANUFACTURERS. THESE REQUESTS SHALL ACCOMPANY BUT NOT BE INCLUDED IN THE BASE BID ON THE SPECIFIED BID DUE DATE. SUBMIT TWO (2) COPIES OF REQUEST FOR SUBSTITUTION.
22. ONLY NEW, FIRST CLASS MATERIALS WILL BE USED (EXCEPT AS NOTED). ALL WORK AND EQUIPMENT SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE EXCEPT FOR MANUFACTURER'S GUARANTEES WHICH MAY BE LONGER.
23. ALL GYPSUM BOARD SHALL BE TAPED, SPACKLED AND SANDED SMOOTH PRIOR TO FINISHING, METAL BEADING SHALL BE USED ON ALL OUTSIDE CORNERS WHERE APPLICABLE.
24. THE GENERAL CONTRACTOR SHALL BEAR FULL RESPONSIBILITY AND COSTS FOR THE FOLLOWING:
    A. PERMITS, LICENSES, INSPECTIONS AND FEES (ALL IMPACT FEES).
    B. TEMPORARY POWER AND UTILITIES.
    C. TRASH REMOVAL.
    D. LIABILITY AND WORKMEN'S COMPENSATION INSURANCE, ETC.
    E. AND OTHER ITEMS INDICATED IN SPECIFICATIONS.
    F. SHORING
25. ALL PENETRATIONS THROUGH EXISTING ROOF SHALL BE SEALED IN PITCH POCKETS AT PIPING, CONDUIT, ETC.; FLASH DUCTS AND CRUBS.
26. REMOVAL, DISPOSAL, ALTERATION AND RELOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT, CONDUITS, PIPES AND DUCTS ARE INCLUDED IN THE WORK.

FOUNDATION NOTES

1. THE CONTRACTOR SHALL FIELD ASSES AND DETERMINE THE METHOD FOR EXCAVATION, SHORING AND FORMING NEW FOOTINGS AND FOUNDATION WALLS.
2. THE EXCAVATION CONTRACTOR WILL USE ALL NECESSARY PRECAUTIONS WHEN EXCAVATING AT OR NEAR EXISTING BUILDING FOUNDATIONS/ TREES/ ETC.

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Annotations, Abbreviations and General Notes

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

T2

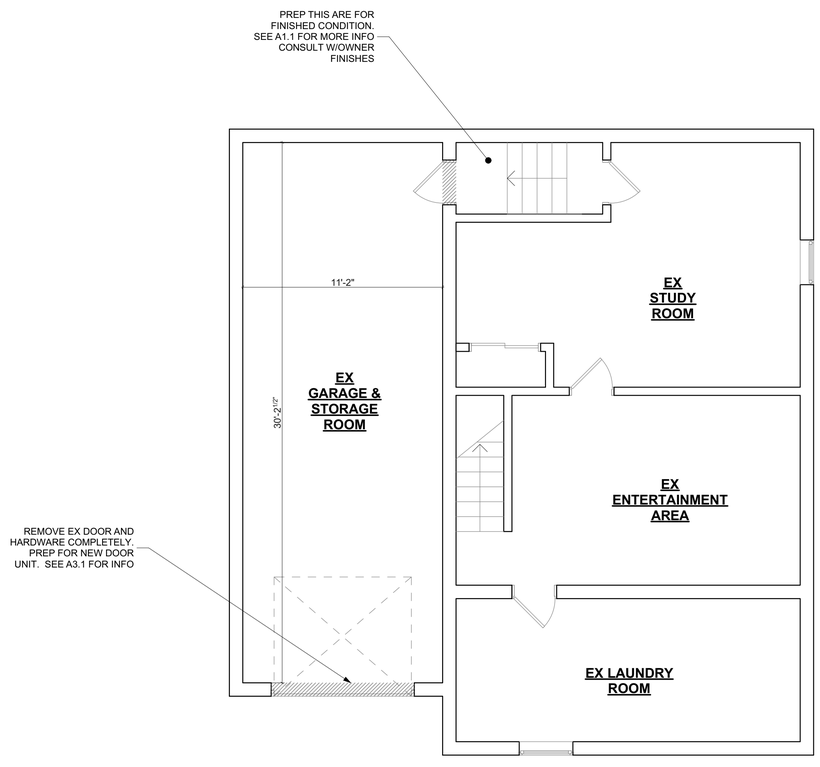
GENERAL DEMOLITION NOTES

A. CONTRACTOR TO VERIFY IN FIELD EXISTING CONDITIONS. ANY DEFIATION FROM THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER/ENGINEER IMMEDIATELY.
B. BUILDING AND SITE WILL BE CONTINUED OPERATIONS DURING DEMOLITION AND REMODELING PHASES.
C. THE DEMOLITION PLAN AND EXISTING CONDITIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND INCLUDE IN THEIR BID. ITEMS WHICH ARE INTENDED TO BE REMOVED, RELOCATED, OR SALVAGED ARE SHOWN AS DIAGONAL LINES. ALL OTHER ITEMS ARE INTENDED TO REMAIN IN PLACE.
D. COORDINATE DEMOLITION AND REPAIRS, PROVIDE TEMPORARY ROOFING AS REQUIRED. DO NOT LEAVE ANY AREAS EXPOSED TO ELEMENTS, WITHOUT TEMPORARY ROOFING.
E. DEMOLITION SHALL INCLUDE, BUT IS NOT LIMITED TO, THE TIMES IDENTIFIED. THE CONTRACTOR SHALL COORDINATE ALLREQUIRED RENOVATION AND NEW CONSTRUCTION WITH THE EXISTING BUILDING TO IDENTIFY THE TOTAL EXTENT OF THE DEMOLITION REQUIRED AND AS LISTED HERE-IN.
F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL EXISTING BUILDING COMPONENTS,MATERIALS, EQUIPMENT, AND APPURTENANCES AS REQUIRED TO BUILD, ERECT, INSTALL, OR ACCOMODATE ALL NEW CONSTRUCTION, WITH THE CONTRACTING OFFICE HAVING FIRST RIGHT OF REFUSAL ON ALL REMOVED ITEMS.
G. ITEMS NOTED TO BE REMOVED AND SALVAGED OR REINSTALLED SHALL BE CAREFULLY REMOVED BY THE CONTRACTOR WITHOUT DAMAGE AND STORED OR REINSTALLED ON THE SITE AS DIRECTED. REMOVED AND SALVAGED ITEMS SHALL REMAIN THE PROPERTY OF THE OWNER.
H. IN THE EVENT THE CONTRACTOR ENCOUNTERS ON THE SITE MATERIAL REASONABLE BELIEVED TO BE ASBESTOS, LEAD-BASED PAINT, OR ANY HAZARDOUS MATERIAL WHICH HAS NOT BEEN RENDERED HARMLESS, THE CONTRACTOR SHALL IMMEDIATELY REPORT THE CONDITION TO THE OWNER AND PROPER ABATEMENT SHALL BE DONE.
I. THE CONTRACTOR IS RESPONSIBLE FOR THE ERECTION, MAINTENANCE AND REMOVAL OF ALL CONSTRUCTION ASSISTANCE DEVICES SUCH AS SCAFFOLDING AND BARRIERS.

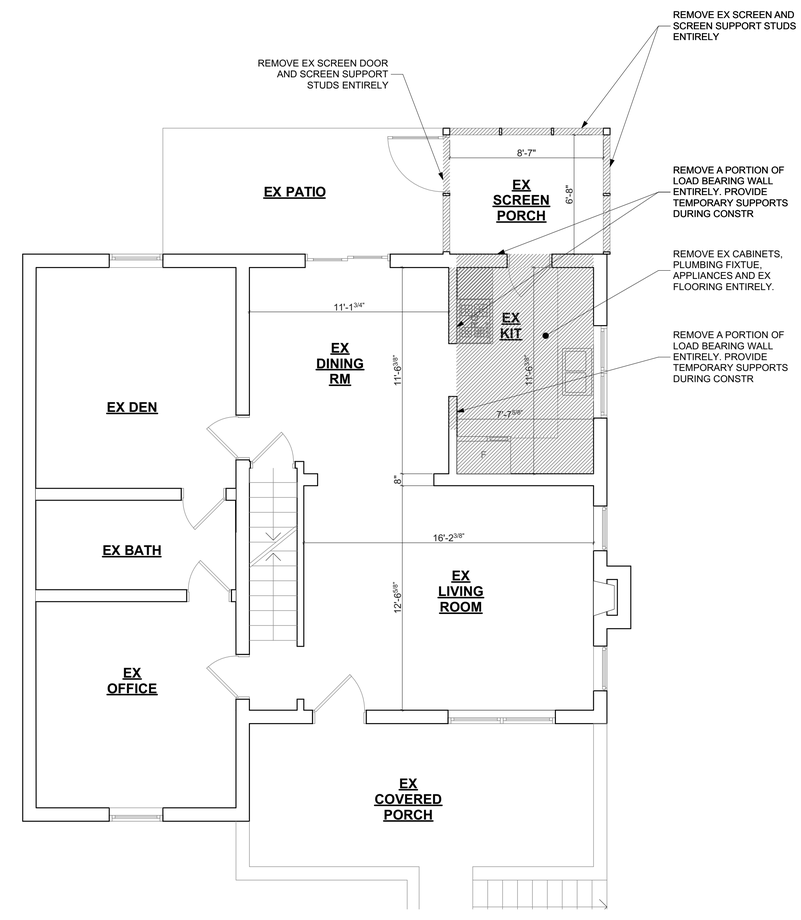
DEMOLITION LEGEND

ITEMS TO BE COMPLETELY DEMOLISHED

ITEMS TO REMAIN AS IS



Ex Basement Floor Plan 1.
1/4" = 1'-0" D1.1



Ex First Floor Plan 2.
1/4" = 1'-0" D1.1

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Existing and Demolition Plans

Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

D1.1

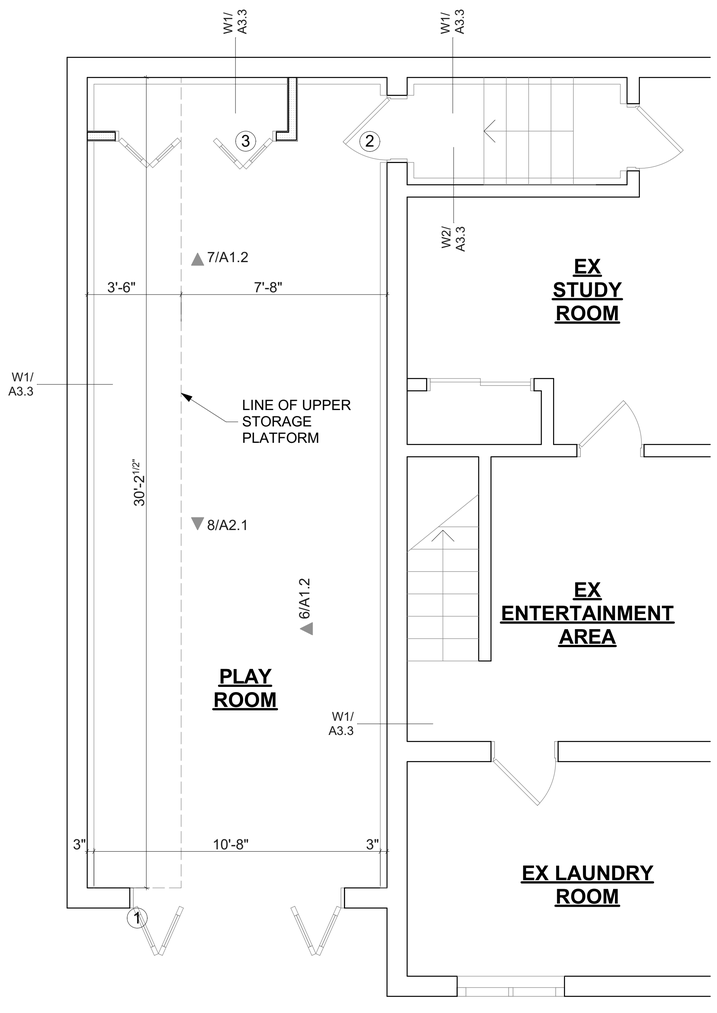
GENERAL NOTES:

1. STUD MEASUREMENTS ARE FROM UNFINISHED MATERIAL TO UNFINISHED MATERIAL.
2. COORDINATE ALL FINISH MATERIALS AND ALL FINAL PRODUCTS WITH OWNER.
3. ALL MEASUREMENTS NEED TO BE VERIFIED IN FIELD.
4. UNLESS OTHERWISE NOTED, ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR CONDITIONS ELSEWHERE
5. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE DRAWINGS AND OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER BEFORE PROCEEDING WITH ANY WORK INVOLVED
6. THE CONTRACTOR SHALL VERIFY ALL JOB SITE CONDITIONS AND RELATED DIMENSIONS PRIOR TO CONSTRUCTION
7. COMPLIANCE WITH CODES AND ORDINANCES GOVERNING THE WORK SHALL BE MADE AND ENFORCED BY THE GENERAL CONTRACTOR
8. MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION OF MATERIALS SHALL BE FOLLOWED
9. NO WORK OR ORDERING OF MATERIAL MAY BE STARTED UNTIL ALL DIMENSIONS AND MEASUREMENTS WHICH MAY BE FOUND INDICATED ON DRAWINGS HAVE BEEN VERIFIED.
10. NO PLANS SHALL BE SCALED; DIMENSIONS SHALL BE USED
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTION AND MISALIGNMENT ACCORDING TO APPLICABLE CODES AND STANDARDS
12. THE CONTRACTOR SHALL REPAIR AND RESTORE TO ITS ORIGINAL CONDITION ALL WORK AND ITEMS DAMAGED AS A RESULT OF BUILDING OPERATIONS AND SHALL LEAVE THE WORK COMPLETED TO THE TRUE INTENT OF THE DRAWINGS AND SPECIFICATIONS AND THE SATISFACTION OF THE DESIGNER AND OWNER.
13. ANY DISTURBANCE OR DAMAGE TO THE EXISTING BUILDING OR UTILITIES RESULTING EITHER DIRECTLY OR INDIRECTLY FROM THE OPERATION OF THESE DRAWINGS SHALL BE PROMPTLY REPAIRED, RESTORED OR REPLACED TO THE SATISFACTION OF THE DESIGNER AT NO ADDITIONAL COST TO THE OWNER
14. ALL TRANSITIONS OF NEW WORK TO EXISTING (WALLS, FLOORS AND CEILINGS) WORK SHALL BE CAREFULLY EXECUTED. EXISTING CONSTRUCTION SHALL BE REPAIRED AS NEEDED AND PATCHED TO MATCH FINISHES OF ADJACENT SURFACES
15. THE CONTRACTOR SHALL COORDINATE THE WORK WITH MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ALL NECESSARY OPENINGS AND PENETRATIONS THROUGH WALLS, CEILINGS AND FLOORS
16. ALL EXPOSED PIPES, CONDUITS OR DUCTS IN FINISHED AREAS, WHETHER SHOWN ON DRAWINGS OR NOT, SHALL BE FURRED OUT WITH GYP BD
17. ALL PLUMBING, ELECTRICAL AND MECHANICAL WORK WHICH SHALL BE ABANDONED FOR PROPOSED CONSTRUCTION WORK SHALL BE CUT BACK, REROUTED, CAPPED AND SAFED OFF
18. ALL MATERIALS AND CONSTRUCTION TO BE INCORPORATED IN THE WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE ASTM SPECIFICATIONS APPLICABLE AND SHALL CONFORM TO THE STANDARDS AND RECOMMENDATIONS OF THE VARIOUS TRADE INSTITUTES (A.C.I., A.I.S.C., ETC)

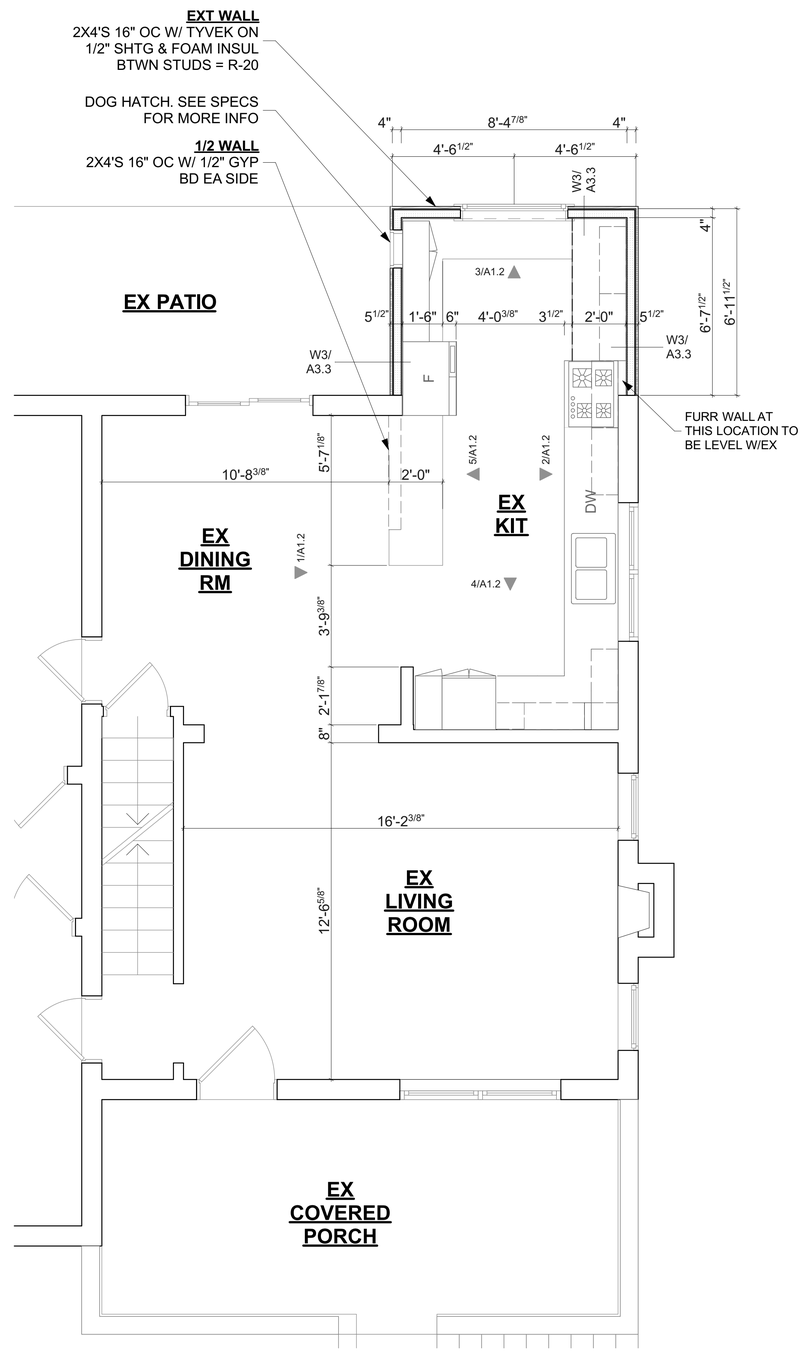
WALL LEGEND

EXISTING WALL TO REMAIN

NEW PARTION WALL



Partial Basement Plan 1.
3/8" = 1'-0" A1.1



Partial First Floor Plan 2.
3/8" = 1'-0" A1.1

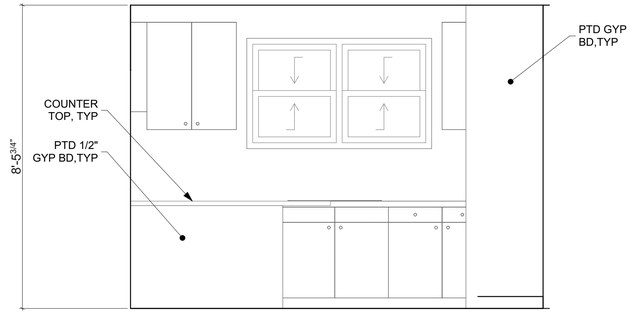
BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

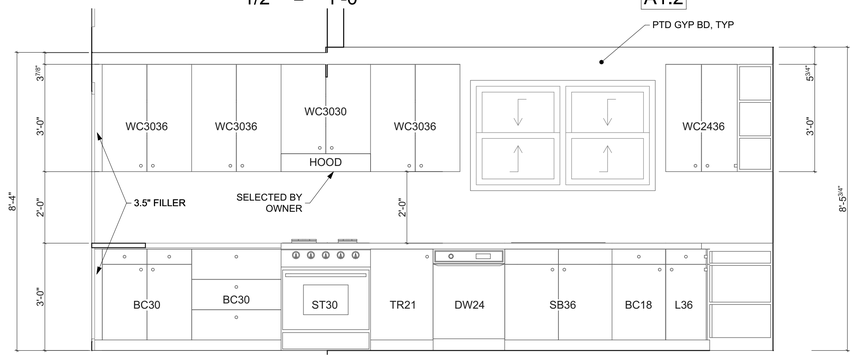
Partial First Floor Plan, Partial Basement Plan

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

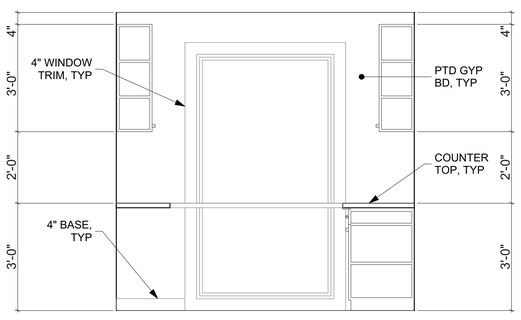
A1.1



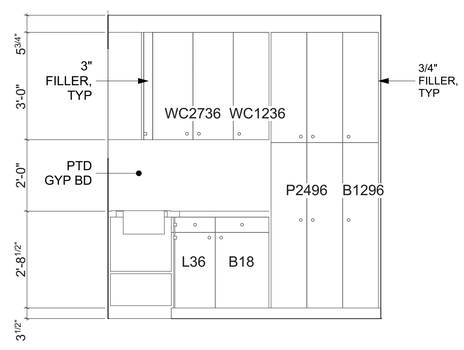
Int Elev Facing Kitchen — 1. A1.2
1/2" = 1'-0"



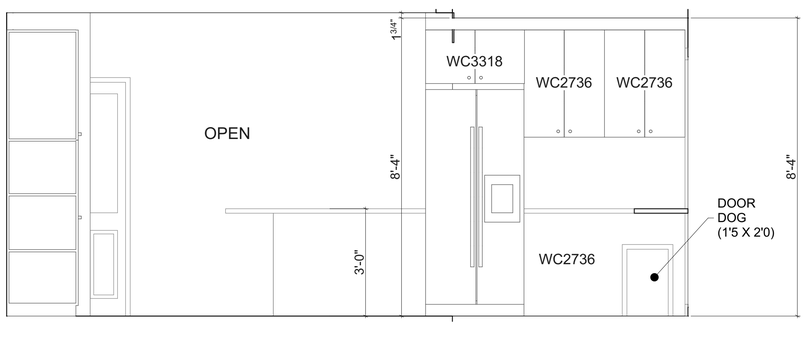
Int Elev Facing Sink — 2. A1.2
1/2" = 1'-0"



Int Elev Facing Rear Window — 3. A1.2
1/2" = 1'-0"

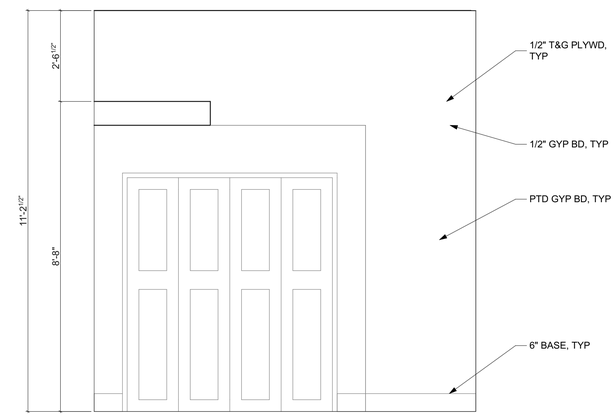


Int Elev Facing Pantry — 4. A1.2
1/2" = 1'-0"

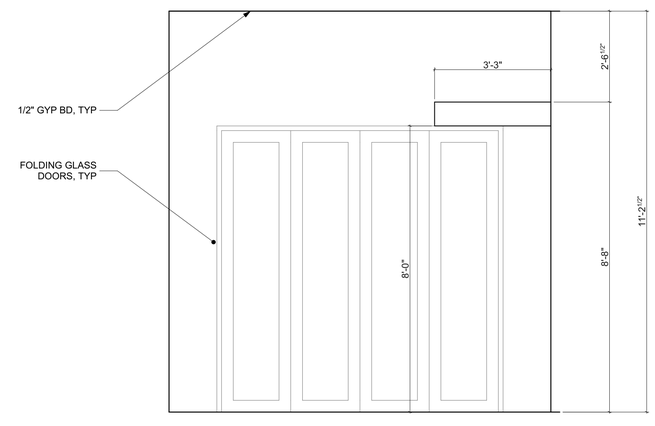


Int Elev Facing Dog Door — 5. A1.2
1/2" = 1'-0"

Int Elev Facing Loft Landing — 6. A1.2
3/8" = 1'-0"



Int Elev Facing Storage Closet — 7. A1.2
1/2" = 1'-0"



Int Elev Facing Storage Closet — 8. A1.2
1/2" = 1'-0"

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Interior Elevations

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

A1.2

NOTE

NO CHANGES TO ANYTHING ON THE FRONT EXTERIOR EXCEPT THE ADDITION OF NEW FOLDER GLASS DOORS AT PROPOSED GARAGE CONVERSION

Existing Front Elevation | 1.
3/8" = 1'-0" | A2.1

Proposed Front Elevation | 2.
3/8" = 1'-0" | A2.1

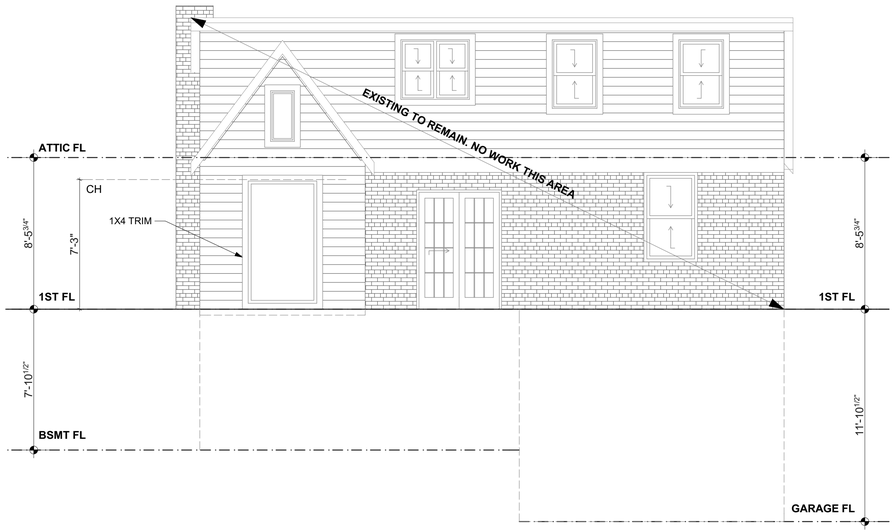
BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

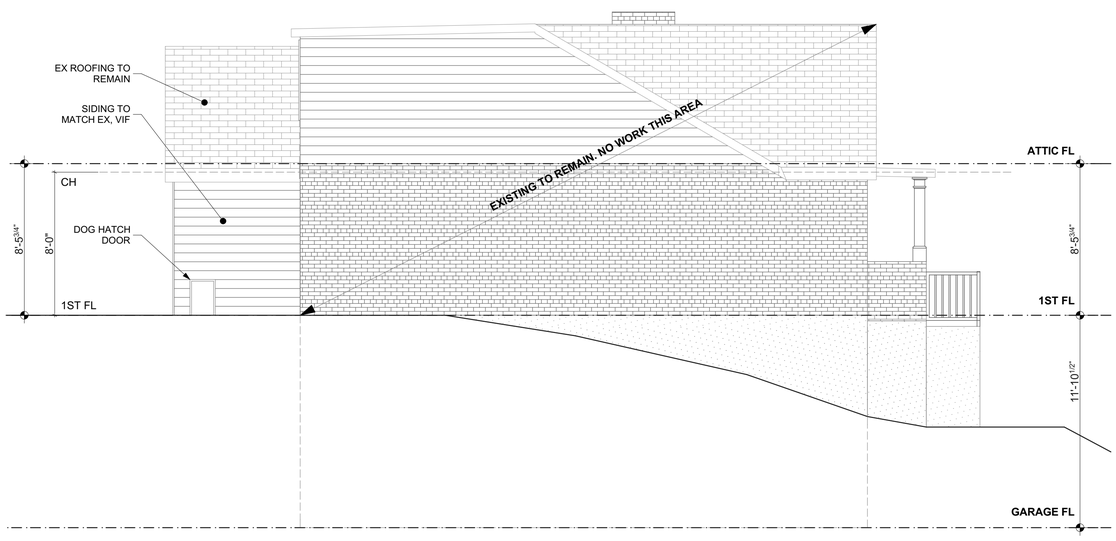
Proposed Front Elevation, Existing Front Elevation

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

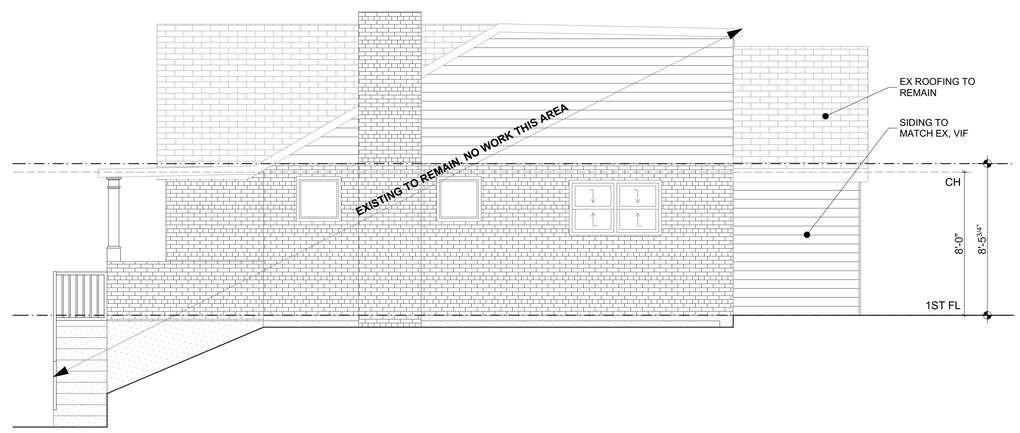
A2.1



Rear Elevation 1.
1/4" = 1'-0" A2.1



Left Elevation 2.
1/4" = 1'-0" A2.2



Right Elevation 3.
1/4" = 1'-0" A2.2

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Right Elevation, Left Elevation, Rear Elevation

Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

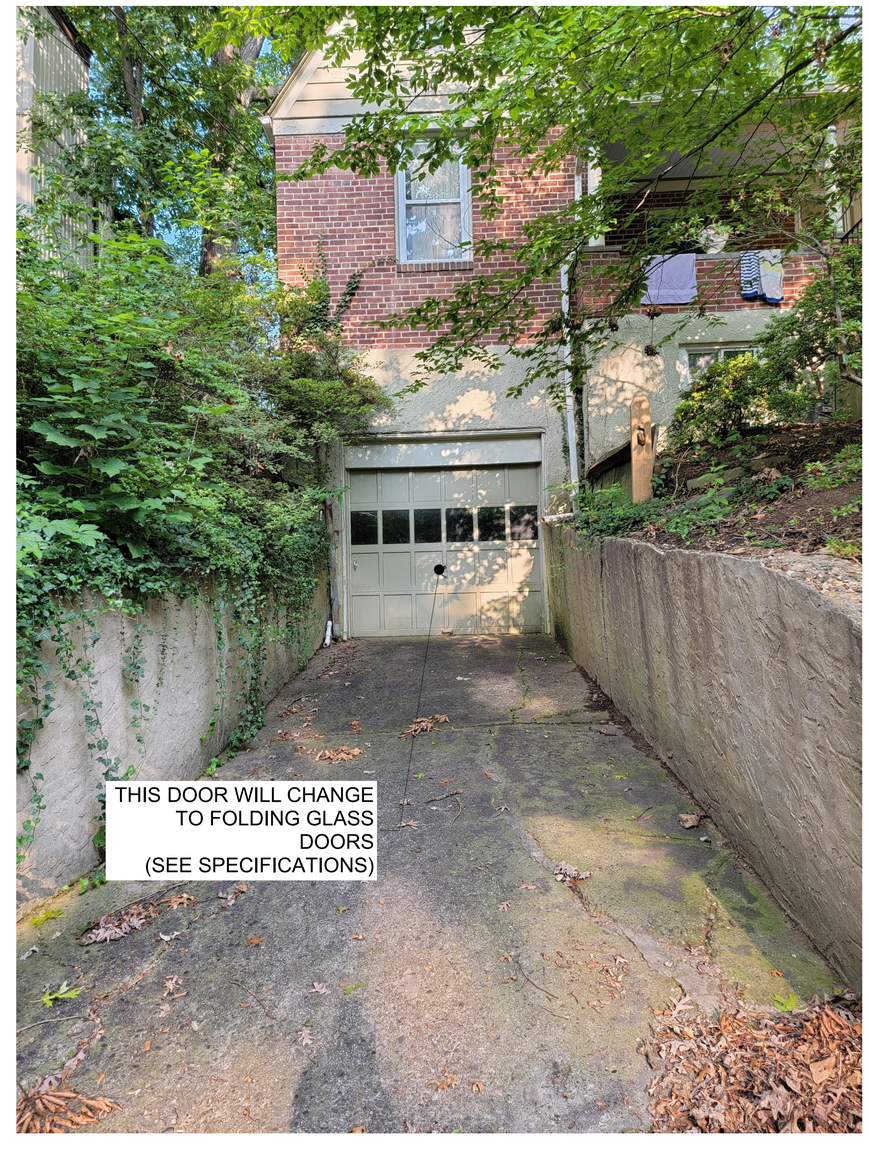
A2.2

NO WORK TO
THIS AREA

EXISTING FRONT IMAGE

THIS AREA TO BE
ENCLOSED AND
INCORPORATED
INTO KITCHEN
ALTERATIONS

EXISTING REAR IMAGE



BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

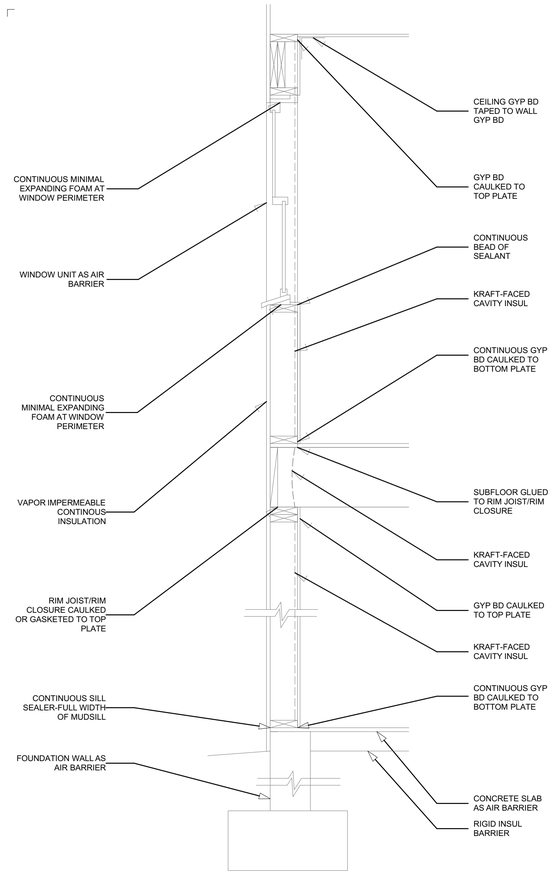
The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

EXISTING PICTURES

Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

Drawn by	Date
LB	10.19.21
Checked by	Date
.	

A2.3



BUILDING ENVELOPE SECTION (AIR BARRIER) 1.
GRAPHICAL PURPOSES ONLY A3.1

FINISH SCHEDULE

DESIGNATION	FLOOR	WALL	BASE	CEILING	REMARKS
KITCHEN	CERAMIC	WR	PB	WR	GLOSSY PAINT, WOOD PATTERN TILE
EX DINING RM	HARDWOOD	WR	PB	WR	PAINT TO MATCH EX

EX - PAINTED EXPOSED JOIST
PDW - PAINTED DRYWALL
WR - WATER RESISTANT GYP BD
PB - PAINTED BASEBOARD

WINDOW SCHEDULE

		CAT. NO.	U-FACTOR	FRAME		TYPE	INFORMATION
SYM.	QTY.			W	H		
A	1		.30	4-6	7-6	FIXED PICTURE	TEMPERED GLASS UNIT

1. WINDOWS SPECIFIED ARE BY: CONSULT W/OWNERS
2. WINDOWS ARE: ALUM, LOW "E" COATING W/ARGON GAS UNLESS OTHERWISE NOTED
3. PROVIDE ALL THE NECESSARY HARDWARE, WEATHER STRIPPING, TRIM PIECES, ETC.
4. PROVIDE SCREENS FOR ALL OPERABLE WINDOWS. COLOR TO BE SELECTED BY OWNER.
5. REFER TO PLANS AND ELEVATIONS FOR WINDOW LOCATIONS. VERIFY SIZES AND QUANTITES.
6. APPLY FOAM BACKER ROD AND CAULK TO EXTERIOR PERIMITER OF TRIM AT SIDING JOINT.

DOOR SCHEDULE

DOOR							FRAME		DETAILS			
DOOR NO	TYPE	HGT	WIDTH	THICK	MATERIAL	FINISH/ COLOR	MATERIAL	FINISH/ COLOR	HEAD	JAMB	QT.Y	REMARKS
1		8'-0"	8'-0"	$1^3/_4$"	WD/GLS	PAINTED	WOOD	PAINTED			1	EXTERIOR DOOR
2		6'-8"	2'-6"	$1^3/_8$"	WOOD	PAINTED	WOOD	PAINTED			1	INTERIOR SWING DOOR
3		6'-8"	6'-0"	$1^3/_8$"	WOOD	PAINTED	WOOD	PAINTED			1	INTERIOR BIFOLD DOOR

NOTES:
1. Check drawings for swing directions and locations.
2. All door hardware "TO BE SELECTED BY OWNER" unless otherwised noted
3. Exterior doors are by "Weathershield". Verify with manufacturer prior to install
4. Shop drawings to be submitted to Designer for approval.
5. Rated doors to have compatible equal rated frames.

TABLE R402.4.1.1
AIR BARRIER AND INSULATION INSTALLATION

COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA
General requirements	A continuous six-sided air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material. All ceiling, wall, floor and slab insulation shall achieve Grade I installation per the RESNET Standards or, alternatively, Grade II for surfaces that contain a layer of continuous, air impermeable insulation > R5.
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of not less than R-3 per inch. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed. Doors adjacent to unconditioned space or ambient conditions shall be made substantially air-tight with weather stripping or equivalent gasket.	Continuous exterior insulation shall continue over window and door headers. Skylight and window chases through unconditioned attic space must be insulated to exterior wall values per table 402.1.2.
Rim joists	Rim joists shall include continuous air barrier.	Rim joists shall be insulated per Table 402.1.2.
Floors (including above garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace walls.
Shafts, penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.	Duct shafts or chases next to exterior or unconditioned space shall be insulated.
Narrow cavities		Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.	Walls next to unconditioned garage space shall be insulated.
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the drywall.	Recessed light fixtures installed in the building thermal envelope shall be air tight and IC rated.
Plumbing and wiring	Seal any plumbing or wiring that penetrates the building envelope.	Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.	
Common wall separating dwelling units	Air barrier is installed in common wall between dwelling units.	
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the subfloor or drywall.	
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.	
Fireplace	An air barrier shall be installed on fireplace walls.	

a. In addition, inspection of log walls shall be in accordance with the provisions of ICC-400.

TABLE R303.1.3(1)
DEFAULT GLAZED FENESTRATION *U*-FACTORS

FRAME TYPE	SINGLE PANE	DOUBLE PANE	SKYLIGHT	
			Single	Double
Metal	1.20	0.80	2.00	1.30
Metal with Thermal Break	1.10	0.65	1.90	1.10
Nonmetal or Metal Clad	0.95	0.55	1.75	1.05
Glazed Block	0.60			

TABLE R303.1.3(2)
DEFAULT DOOR *U*-FACTORS

DOOR TYPE	*U*-FACTOR
Uninsulated Metal	1.20
Insulated Metal	0.60
Wood	0.50
Insulated, nonmetal edge, max 45% glazing, any glazing double pane	0.35

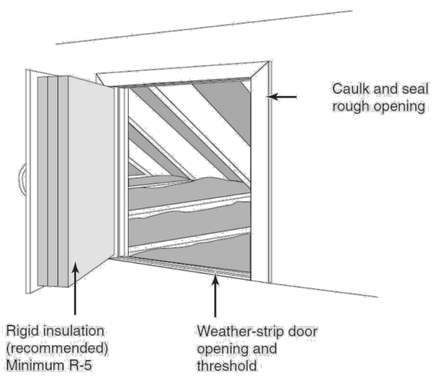
TABLE R402.1.2
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT[a]

Fenestration *U*-Factor[b]	0.30 *U*-Factor
Skylight[b] *U*-Factor	0.55 *U*-Factor
Glazed Fenestration SHGC[b]	0.40 Solar Heat Gain Coefficient (SHGC)
Ceiling	R-49
Wood Frame Wall and Rim Joists	R-19 in cavity + R-5 continuous on the exterior, **or** R-13 in cavity + R-10 continuous on the exterior, **or** R-15 continuous
Mass Wall[c]	R-15 continuous on the exterior, or R-20 continuous on the interior
Frame Floor	R-25 + R-5 continuous
Elevated Slab	R-15 continuous
Basement Wall	R-19 cavity + R-5 continuous on the exterior, **or** R-13 in cavity + R-10 continuous on the exterior, **or** R-15 continuous
Slab on Grade[d]	R-10 perimeter insulation for a depth of 2 ft.
Conditioned Crawlspace Wall	R-19 cavity + R-5 continuous on the exterior, **or** R-13 in cavity + R-10 continuous on the exterior, **or** R-15 continuous

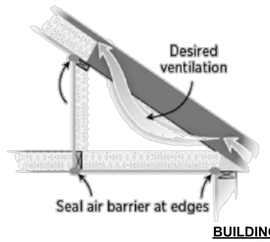
For SI: 1 foot = 304.8 mm.
a. *R*-values are minimums. *U*-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed *R*-value of the insulation shall not be less than the *R*-value specified in the table.
b. The fenestration *U*-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
c. The second *R*-value applies when more than half the insulation is on the interior of the mass wall.
d. R-5 shall be added to the required slab edge *R*-values for heated slab.

TABLE R402.4.1.2
MAXIMUM ALLOWED AIR LEAKAGE RATES

	New construction	Level 3 Alteration affecting 80% or more of the aggregate work of the building (Gut Rehabilitation)
Single family detached, two family attached (duplex), townhouses, flats	3 ACH50	3 ACH50
Dwelling units in Multifamily buildings 3 stories and less	.30 CFM50/SF enclosure area of each unit or 3 ACH50	.30 CFM50/SF enclosure area of each unit or 3 ACH50



ATTIC HATCH DOOR DETAIL



NOTE:
a baffle shall be installed adjacent to soffit and eave vents. Baffles shall maintain an opening equal or greater than the size of the vent. The baffle shall extend over the top of the attic insulation. The baffle shall be permitted to be any solid material.

Figure 5. Insulate and air seal the kneewall itself, as shown, or along the roof line (Source: DOE 2000a).

BUILDING ENVELOPE DETAIL: AT ROOF/EAVE/SOFFIT

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

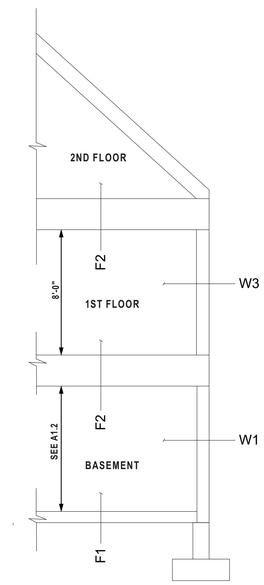
The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Schedules

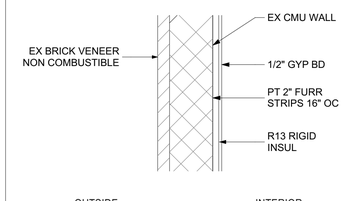
Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

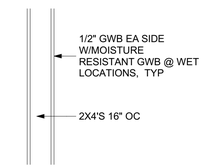
A3.1



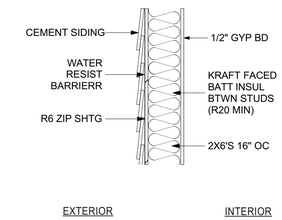
PARTIAL BUILDING SECTION
(GRAPHICAL PURPOSES ONLY)



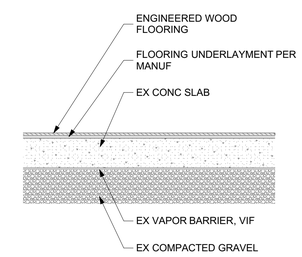
W-1 TYPICAL WALL
(DESIGN # U 905)



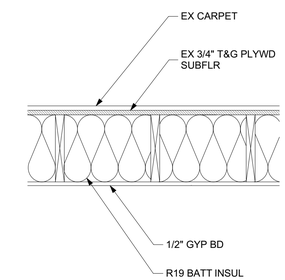
W-2 TYPICAL INTERIOR WALL



W-3 TYPICAL EXTERIOR WALL



F-1 GARAGE FLOOR ASSEMBLY

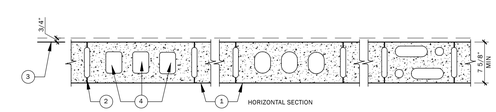


F-2 FLOOR ASSEMBLY

UL FIRE RATED

Design No. U905

Bearing Wall Rating - 2 HR.
Nonbearing Wall Rating - 2 HR.



1. Concrete Blocks* - Various designs. Classificaon D-2 (2 hr).

2. Mortar - Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.

3. Portland Cement Stucco or Gypsum Plaster - If used, add 1/2 hr. to Classification. Where combustible members are framed in wall, plaster or stucco must be applied on teh face opposite framing to achieve a max. Classification of 1-1/2 hr. Attached to concrete blocks (Item 1)

4. Loose Masonry Fill - If all core spaces are filled with loose dry expanded slag, expanded clay or shale (rotary kiln process), water repellant vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to Classification.

5. Foamed Plastic* - (Optional - not shown) 1-1/2 in thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).

Celotex Corp. - Type Thermax

*Bearing the UL Classification Marking

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence

12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Assembly Details

Drawn by	Date
LB	12.06.21
Checked by	Date
-	

A3.3

GENERAL NOTES

A) DESIGN LOADS FOR NEW WORK

1) FLOOR LIVE LOADS

A) BEDROOM = 30 PSF
B) LIVING AREAS = 40 PSF
C) UNHABITABLE ATTICS WITHOUT STORAGE = 10 PSF
D) UNHABITABLE ATTICS WITHOUT STORAGE = 20 PSF

2) ROOF SNOW LOAD

A) Pg = 30 PSF
B) Pf = 18.9 ;MIN PER DCMR = 30 PSF
C) EXPOSURE = B
D) Ce = 0.9
E) I = 1.0
F) Ct = 1.0
G) IN ADDITION TO THE FLAT ROOF SNOW LOAD STATED ABOVE, A SNOWLOAD PROVISION FOR DRAFTING SNOW AND SLOPED ROOF HAS BEEN PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE 2017, SECTION 1608.7

3) WIND LOAD

A) BASIC WIND SPEED (3-SECOND GUST) , V = 115 MPH
B) IMPORTANCE FACTOR = 1.0
C) EXPOSURE = B
D) BUILDING CATEGORY = II

4) BRACED WALL PANEL CONSTRUCTION: WSP AND CS-WSP CONTINUOUS SHEATING STRUCTURAL WOOD PANEL PER THE REQUIREMENTS OF THE 2017 INTERNATIONAL RESIDENTIAL CODE SECTION R602.10
5) IMPOSED CONSTRUCTION LOADS IN EXCESS OF STATED DESIGN LOADS MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO THE IMPOSTION OF SUCH LOADS.
6) THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE INTERNATIONAL RESIDENTIAL CODE/2017

B) GENERAL

1) THE GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL DETERMINE THE SCOPE OF THE STRUCTURAL WORK FROM THE CONTRACT DOCUMENTS TAKEN AS A WHOLE. THE STRUCTURAL DRAWINGS SHALL NOT BE CONSIDERED SEPARATE FOR PURPOSES OF BIDDING THE STRUCTURAL WORK. DUE CONSIDERATION SHALL BE GIVEN TO THE OTHER STRUCTURAL WORK OR WORK RELATED TO THE STRUCTURE, INCLUDING NECESSARY COORDINATION DESCRIBED OR IMPLIED BY THE ARCHITECTURAL, ELECTRIC, PLUMBING AND MECHANICAL DRAWINGS.
2) SCALES NOTED ON THE DRAWINGS ARE FOR GENERAL INFORMATION ONLY. NO DIMENSIONAL INFORMATION SHALL BE OBTAINED BY DIRECT SCALING OF THE DRAWING.
3) DETAILS, SECTIONS AND NOTES SHOWN ON THESE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR CONDITIONS ELSEWHERE UNLESS OTHERWISE SHOWN OR NOTED.
4) THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL RESULTING REVISIONS TO THE STRUCTUAL SYSTEM AS A RESULT OF ACCEPTANCE OF CONTRACTOR PROPOSED ALTERNATIVES OR SUBSTITUTIONS.
5) THE GENERAL CONTRACTOR (OR CONSTRUCTION MANAGER) SHALL SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS FOR APPROVAL. THE STRUCTURAL ENGINEER WILL NOT BE RESPONSIBLE FOR THE STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT IF THE GENERAL CONTRACTOR FAILS TO OBTAIN APPROVAL OF THE SHOP DRAWINGS. SHOP DRAWINGS ARE REVIEWED AS A CONVENIENCE TO THE GENERAL CONTRACTOR AND ARE NOT A CONTRACT DOCUMENT. THE GENERAL CONTRACTOR SHALL STATE ON THE SHOP DRAWINGS THAT CONTRACT DOCUMENT REQUIREMENTS HAVE BEEN MET AND THAT ALL DIMENSIONS, CONDITIONS AND QUANTITIES HAVE BEEN REVIEWED AND VERIFIED AS SHOWN AND/OR CORRECTED ON THE SHOP DRAWINGS.
6) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY BRACING AND SHORING, AS REQUIRED, TO ENSURE VERTICAL AND LATERAL STABILITY OF THE ENTIRE STRUCTURE OR PORTION THEREOF DURING CONSTRUCTION.
7) ANY REQUIRED TEMPORARY SHORING SHALL BE IN CONFORMANCE WITH OSHA REGULATIONS. UNBRACED EXCAVATIONS SHALL BE SLOPED NO GREATER THAN (1.5) HORIZONTAL TO (1) VERTICAL
8) TEMPORARY BRACING SHALL BE PROVIDED FOR ALL WALLS SUBJECT TO UNBALANCED BACKFILL. BRACE WALL PLUMB UNTIL STABILIZING ELEMENT ABOVE IS IN PLACE.
9) ALL WALLS ARE DESIGNED AS LATERALLY BRACED BY THE FLOOR SYSTEMS. CONTRACTOR SHALL ENSURE THAT WALLS ARE ADEQUATELY BRACED DURING CONSTRUCTION.
10) INFORMATION SHOWN REGARDING EXISTING CONDITIONS HAS BEEN OBTAINED BY LIMITED VISUAL OBSERVATIONS. AREAS NOT VISIBLE HAVE BEEN ASSUMED TYPICAL WITH OBSERVED EXISTING CONDITIONS.
11.) THE CONTRACTOR SHALL MEASURE AND PROVIDE ALL DIMENSIONS, ELEVATIONS AND CONDITIONS AT THE JOB SITE PRIOR TO CONSTRUCTION AND THE SUBMISSION OF SHOP DRAWINGS AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES. VERIFICATIONS AND NOTIFICATION SHALL PROCEED PRIOR TO THE START OF WORK SO THAT ANY NECESSARY CHANGES CAN BE MADE WITHOUT DELAYING THE PROJECT SCHEDULE.

C) DEMOLITION

1) ALL WORK SHALL BE IN GENERAL COMPLIANCE WITH THE INTERNATIONAL RESIDENTIAL CODE/2017
2) FURNISH ALL LABOR AND MATERIAL NECESSARY TO PERFORM THE DEMOLITION WORK IN A COMPLETED MANNER SUCH THAT NEW WORK CAN BE INSTALLED WITH MINIIMUM PREPARATION.
3) CONTRACTOR SHALL INCLUDE IN THE SCOPE OF WORK ALL ASPECTS OF REQUIRED DEMOLITION, SHORING OF EXISTING STRUCTURE, STAGING THE REPAIR TASKS AND SCHEDULING THE WORK IN A MANNER APPROVED BY THE BUILDING MANAGEMENT, CLEAN UP AFTER PORTIONS OF WORK ARE PERFORMED AND CLEAN UP AFTER THE ENTIRE REPAIR IS COMPLETED.
4) CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING REQUIRED FOR DEMOLITION OPERATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF AND PROCEDURES FOR THE REQUIRED TEMPORARY SHORING. TEMPORARY SHORING SHALL BE IN CONFORMANCE WITH OSHA REGULATIONS.
5) THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT DAMAGE OF THE EXISTING STRUCTURE. IN THE EVENT OF DAMAGE, CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND CONTRACT THE STUCTURAL ENGINEER FOR ASSESSMENT OF THE DAMAGE.
6) SCHEDULE ALL WORK IN A CAREFUL MANNER WITH ALL NECESSARY CONSIDERATION FOR THE HOME OWNER. ANY DAMAGE TO PERSON OR PROPERTY AS A RESULT OF DEMOLITION AND RELATED WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

STEEL LINTEL SCHEDULE

OPENING	SIZE	REMARK
UP TO 4-FT.	L3 X 3-1/2 X 1/4	LLH
4-FT. TO 5'-6"	L4 X 3-1/2 X 5/16	LLV
5'-7" TO 7'-6"	L5 X 3-1/2 X 5/16	LLV
7'-7" TO 9'-0"	L6 X 3-1/2 X 5/16	LLV
9'-1" TO 9'-6"	L7 X 4 X 3/8	LLV

NOTES:
1. LLH = LONG LEG HORIZONTAL
2. LLV = LONG LEG VERTICAL
3. MIN. 6 IN. BEARING REQUIRED AT EACH END OF LINTEL.
4. BRICK/WALL ANCHORS SHALL BE 16 IN. AT FIRST COURSE ABOVE LINTEL.
5. VERTICAL LEG OF LINTEL SHALL BE TIGHT TO BACK FACE OF BRICK WITH NO GAPS.

D) FOUNDATION AND SLAB ON GRADE

1) ESTIMATED ALLOWABLE SOIL BEARING PRESSURE FOR SHALLOW FOOTINGS IS 1500 PSF. BEARING CAPACITY SHALL BE FIELD DETERMINED BY A LICENSED GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF CONCRETE. SHOULD UNSUIT ABLEMATERIAL BE ENCOUNTERED, FOOTING SHALL BE OVEREXCAVATEDAND REPLACED WITH LEAN CONCRETE, F'c = 2000 PSI. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE MINIMUM OF 2 FEET 6 INCHES BELOW EXTERIOR GRADE, UNLESS NOTED OTHERWISE.
2) THE FOUNDATION FOR THE STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING LATERAL EARTH PRESSURES:
b) WALLS SUPPORTED TOP AND BOTTOM = 35 PCF
3) ALL FOOTING EXCAVATIONS SHALL BE INSPECTGED BY THE BUILDING OFFICIAL PRIOR TO THE PLACING OF ANY CONCRETE. THE BUILDING OFFICIAL SHALL BE GIVEN NOTICE FOR THIS OBSERVATION.
4) TOP OF FOOTINGS SHALL EXTEND TO ELEVATIONS SHOWN. SHOULD UNSUITABLE MATERIAL BE ENCOUNTERED, FOOTING SHALL BE OVEREXCAVATED AND REPLACED WITH LEAN CONCRETE, F'c = 2000 PSI.
5) EXCAVATIONS FOR SPREAD FOOTINGS AND/OR CONTINUOUS FOOTINGS SHALL BE CLEANED AND HAND TAMPED TO A UNIFORM SURFACE.
6) WALLS RETAINING EARTH BACKFILL HAVE BEEN DESIGNED FOR IN SERVICE LOADS ONLY. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING DURING CONSTRUCTION. THE SHORING SHALL NOT BE REMOVED UNTIL THE SUPPORTING ELEMENTS ARE IN PLACE. THE CONCRETE IN THE WALLS AND SUPPORTING ELEMENTS HAS ATTAINED THE SPECIFIED 28 DAY COMPRESSIVE STRENGTH (Fc') AND COMPACTION OF THE BACKFILL HAS BEEN COMPLETED.
7) SLAB ON GRADE SHALL BE UNDERLAID BY A MINIMUM OF 4 INCHES OF GRANULAR MATERIAL HAVING A MAXIMUM AGGREGATE SIZE OF 1.5 INCHED AND NOT MORE THAN 10% OF MATERIAL PASSING THROUGH A NO. 4 SIEVE. PRIOR TO PLACING THE GRANULAR MATERIAL THE FLOOR SUBGRADE SHALL BE PROPERLY COMPACTED, PROOFROLLED, FREE OF STANDING WATER, MUD, ORGANIC MATERIAL AND FROZEN SOIL BEFORE PLACEMENT OF THE CONCRETE, A VAPOR BARRIER SHALL BE PLACED ON TOP OF THE GRANULAR MATERIAL.

E) UNDERPINNING

1) UNDERPINNING ACTIVITES SHOULD ONLY BE CARRIED OUT BY A SPECIALTY CONTRACTOR WITH MORE THAN FIVE YEARS PROGRESSIVE EXPERIENVE WITH UNDERINNING.
2) ALL EXCAVATION MUST BE HAND DUG IN STRICT CONFORMANCE TO THE SEQUENCE STATED HERE IN. THE EXCAVATION SHALL BE INSPECTED BEFORE FINAL TRIMMING IS CARRIED OUT.
3) EXCAVATION: THE CONTRACTOR SHALL EXCAVATE ONLY THE 4'-0" SEGMENT OF THE WALL TO BE UNDERPINNED IN CONFORMANCE WITH THE SEQUENCE OF CONSTRUCTION.
4) UNDERPINNING OF THE EXISTING BUILDING WALLS SHALL BE OF CONCRETE HAVING A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. UNDERPINNING SHALL BE CONTINOUS ALONG THE WALLS AND BEAR ON UNDISTURBED EARTH. BEARING MATERIAL SHALL BE APPROVED BY REGISTERED GEOTECHNICAL ENGINEER PRIOR TO CONCRETE PLACEMENT, EXISTING WALLS SHALL BE ADEQUATELY BRACED AND SUPPORTED UNTIL NEW FOUNDATION IS IN PLACE.
5) SEQUENCE OF CONSTRUCTION: INSTALL UNDERPINNING UNITS AS FOLLOES; INSTALL ALL "A" UNIT BEFORE PROCEESING WITH "C" UNITS, UNITS "E", UNITS "B" AND UNITS "D" AS LAID OUT ON PLAN. FOLLOW THE SEQUENCE IN A CONTINUOUS CYCLICAL PATTERN. ADJACENT UNITS SHALL NOT BE PLACED WITHIN 4 DAYS OF EACH OTHER. ALLOW 24 HOURS CURING PRIOR TO PLACING 2" DRY PACKING NON SHRINK TO EXISTING WORK. EACH UNIT TO BE MAXIMUM SPAN OF 4'-0", UNLESS NOTED OTHERWISE.
6) UNDERPINNING OF MORE THAN 4'-0" HIGH WALL SECTION SHALL BE DESIGNED AS A REINFORCED CONCRETE WALL EXTENSION. IIF THE UNDERPINNING SECTION IS MORE 4;-0"; DRILL AN EPOXY GROUT 2#4 DOWEL BARS INTO EXISTING WALL AND FOOTING. PROVIDE A LAP SLIVE OF 24" BETWEEN THE DOWL BAR AND REBAR FOR THE NEW UNDERPINNED WALL SECTION.
7) THE CONTRACTOR SHALL ENSURE THAT ALL REQUIRED WALL BRACING SUSTEM ARE IN PLACE AND INTACT AT TIME OF EXCAVATION UNTIL LOAD TRANSFER TO NEWLY PLACED AND CURED FOOTING. THE FLOOR JOIST SHALL BE IN PLACE PROVIDING REQUIRED WALL BRACING THROUGH DIAPHRAGM ACTION. THE UNBRACED LENGTH OF ANY WALL SHALL NOT EXCEED 8 LINEAR FEET,
8) THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD. DIMENSIONS DEPRICTED ON THE PLANS ARE BASED ON THE ARCHITECTURAL DRAWINGS AND/OR LIMITED SITE VISIT CONDUCTED BY ENGINEER.
9) CONTRACTOR SHALL CONSULT WITH ADJACENT PROPERTY OWNER (S) PRIOR TO COMENCEMENT OF UNDERPINNING ACTIVITIES. CONTRACTOR SHALL DOCUMENT THE EXISTING CONDITION OF THE SHARED PARTY WALL (S) BY TAKING PHOTOGRAPHS PRIOR TO STARTING EXCAVATION. CONTRACTOR SHALL TAKE ADDTIIONAL PHOTOGRAPHS AT MIDWAY POINT IN THE UNDERPINNING CONSTRUCTION AND ANOTHER SET OF PHOTOGRAPHS UPON COMPLETION. THESE PHOTOGRAPHS SHALL DOCUMENT THE CONDITION OF THE WALL (S) FROM THE ADJACENT PROPERTY (IES) AND WITHIN THE PROPERTY BEING RENOVATED.

G) CAST-IN-PLACE CONCRETE

1) ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301, ACI318 AND ACI 302.
2) CAST IN PLACE CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH F'c AS FOLLOWS:
a) SLAB-ON-GRADE AND FOOTINGS = 3000 PSI
3) CEMENT SHALL COMPLY WITH A STM C150, TYPE I OR TYPE II.
4) THE USE OF FLY ASH/OR GROUND GRANULATED BLAST-FURNANCE SLAG IS NOT PERMITTED.
5) CONCRETE SLUMP SHALL 4 INCHES +/-1 INCH.
6) ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE A MINIMUM AIR ENTRAINMENT OF 6% +/-1.5%
7) CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60. REINFORCEMENT BARS SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT UNLESS INDICATED ONTHE CONTRACT DOCUMENTS OR APPROVED BY THE STRUCTURAL ENGINEER.
8.) PROVIDED WELDED WIRE FABRIC 6 X6 - W1.4X W1.4 IN ALL SLAB ON GRADE. ALL WRE FABRIC SHALL CONFORM TO ASTM .A185. ALL MESH EDGES SHALL LAP A MINIMUM OF 2 SQUARES.
9) MINIMUM CONCRETE COVER BETWEEN FACE OF REINFORCING BAR AND FACE OF CONCRETE SHALL BE AS FOLLOWS:
a) CONCRETE CAST AGAINST EARTH = 3"
b) FORMED CONCRETE EXPOSED TO WEATHER OR EARTH = 2"
10) DETAILING OF CONCRETE REINFORCEMENT BARS AND ACCESSORIES SHALL CONFORM TO THE RECOMMEDATIONS OF ACI 315 'DETAILS AND DETAILING OF CONCRETE REINFORCEMENT AND ACI SP-68 'DETAILING MANUAL'. PLACING OF REINFORCING BARS SHALL CONFORM TO THE RECOMMENDATIONS OF ACI 315R 'MANUAL OF ENGINEERING AND PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES" AND CRSI 'MANUAL OF STANDARD PRACTICE".
11) REINFORCEMENT DESIGNATED AS "CONTINUOUS" SHALL LAP 36 BAR DIAMETERS AT SPLICES UNLESS NOTED OTHERWISE.

H) STRUCTURAL STEEL

1) STRUCTURAL STEEL ROLLED SHAPES AND PLATES SHALL CONFORM TO ASTM A36.
2) ALL PIPE COLUMNS SHALL CONFORM TO ASTM A53 TYPES E OR S, GRADE B, STANDARD PIPE TO BE UNLESS NOTED OTHERWISE.
3) ALL ANCHOR BOLTS SHALL BE ASTM A307 UNLESS OTHERWISE NOTED.
4) ALL WORK SHALL COMPLY WITH THE AISC ASD (NINTH EDITION) CODE "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" EXCEPT THAT PARAGRAPH 4.2.1 SHALL BE DELETED.
5) STRUCTURAL STEEL SHOP DRAWINGS SHALL BE SUPERVISED BY A PROFESSIONAL ENGINEER REGISTERED IN THE DISTRICT OF COLUMBIA AND SHALL INCLUDE DETAILS OF CUTS, CONNECTIONS, HOLES, AND OTHER PERTINENT DATA INDICATE WELDS BY STANDARD AWS 2.1 SYMBOLS SHOWING SIZE, LENGTH AND TYPE OF EACH WELD, SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL.
6) NO FABRICATIONS SHALL PROCEED PRIOR TO SHOP DRAWINGS APPROVAL.
7) NO OPENINGS IN BEAMS OR COLUMNS ARE PERMITTED WITHOUT ENGINEER'S WRITTEN APPROVAL.
8) SPLICING OF STRUCTURAL STEEL MEMBERS WHERE NOT DETAILED ON THE CONTRACT DOCUMENTS IF PROHIBITED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER AS TO LOCATION, TYPE OF SPLICE AND CONNECTION TO BE MADE.
9) THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY MISFABRICATED STRUCTURAL STEEL PRIOR TO ERECTION OF SAME.
10) ONE 1.5 MIL COAT OF SHOP PAINT SHALL BE APPLIED TO ALL STRUCTURAL STEEL WITH THE EXCEPTION OF AREAS TO BE WELDED.
11) STRUCTURAL STEEL CAST INTO OR IN CONTACT WITH CONCRETE SHALL NOT BE PAINTED.
12) PROVIDE A MINIMUM BEARING LENGTH OF 6 INCHES FOR ALL BEAMS SUPPORTED ON MASONRY.
13) PROVIDE STANDARD AISC ANGLE WALL ANCHORS FOR STEEL BEAMS SUPPORTED IN MASONRY POCKETS.
14) GROUT SHALL BE NON-SHRINKABLE, NON-METALLIC CONFORMING TO ASTM C827, AND SHALL HAVE A SPECIFIED COMPRESSIVE STRENGTH AT 28 DAYS OF 5000 PSI. PREGROUTING OF BASE PLATES WILL NOT BE PERMITTED.

HEADER SPAN & NUMBER JACK STUDS

SIZE	SPAN (FT-IN)	NO. JACK STUDS
2-2X4	3-1	1
2-2X6	4-6	1
2-2X8	5-9	1
2-2X10	7-0	2
2-2X12	8-1	2
3-2X8	7-2	1
3-2X10	8-9	1
3-2X12	10-2	2
4-2X8	9-0	1
4-2X10	10-1	1
4-2X12	11-9	1

NO. OF FULL-HEIGHT STUDS @ EA. END OF HEADER IN EXTERIOR WALL

HEADER SPAN (FT.)	MAX. STUD SPACING (16 IN.)
LESS THAN/EQUAL TO 3	1 STUD
4	2 STUDS
8	3 STUDS
12	5 STUDS
16	6 STUDS

STATE OF MARYLAND
ISMAIL FUAD HANNA
30167
PROFESSIONAL ENGINEER
10/27/2021

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 30167, Expiration Date: 5/17/2022.

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Structural Notes

Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

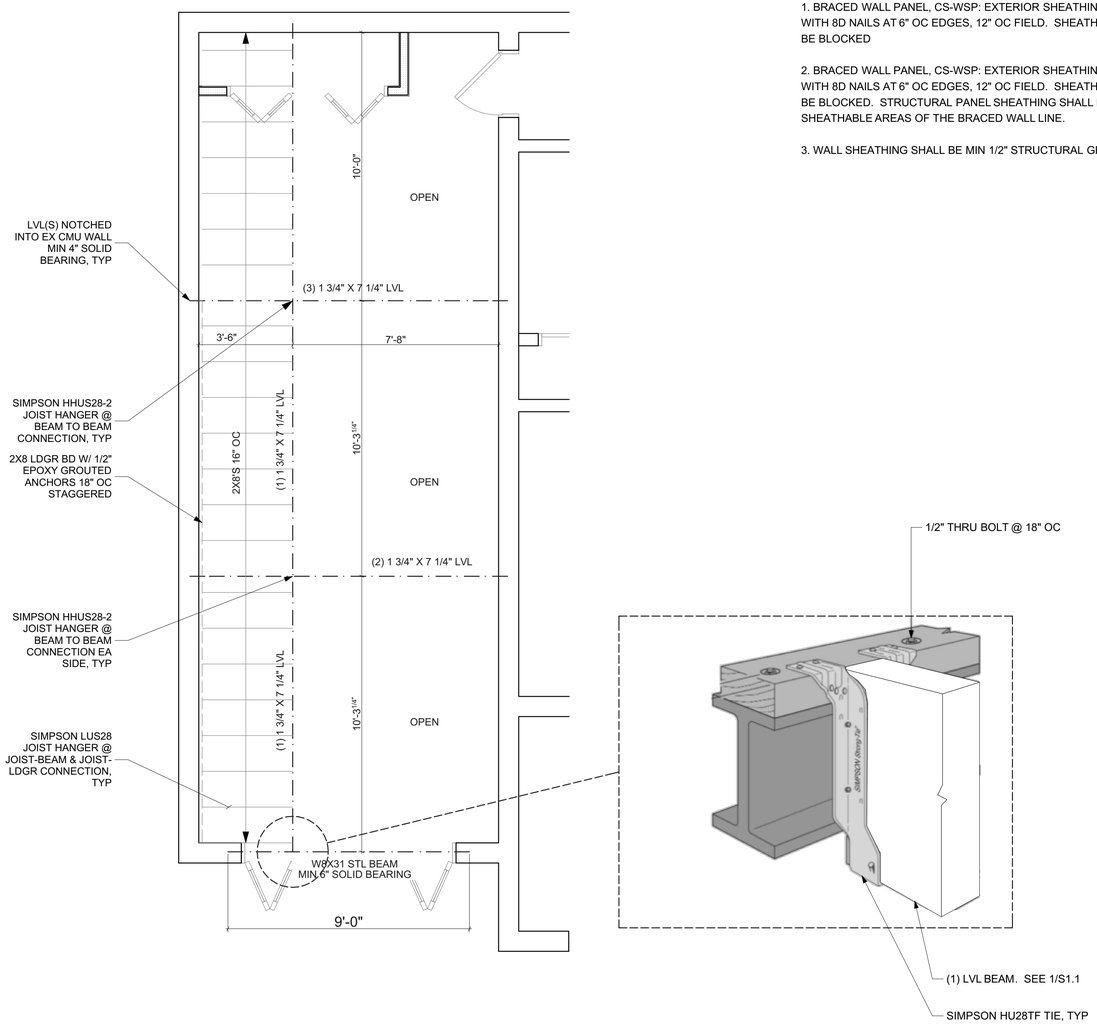
S0.1

NOTES

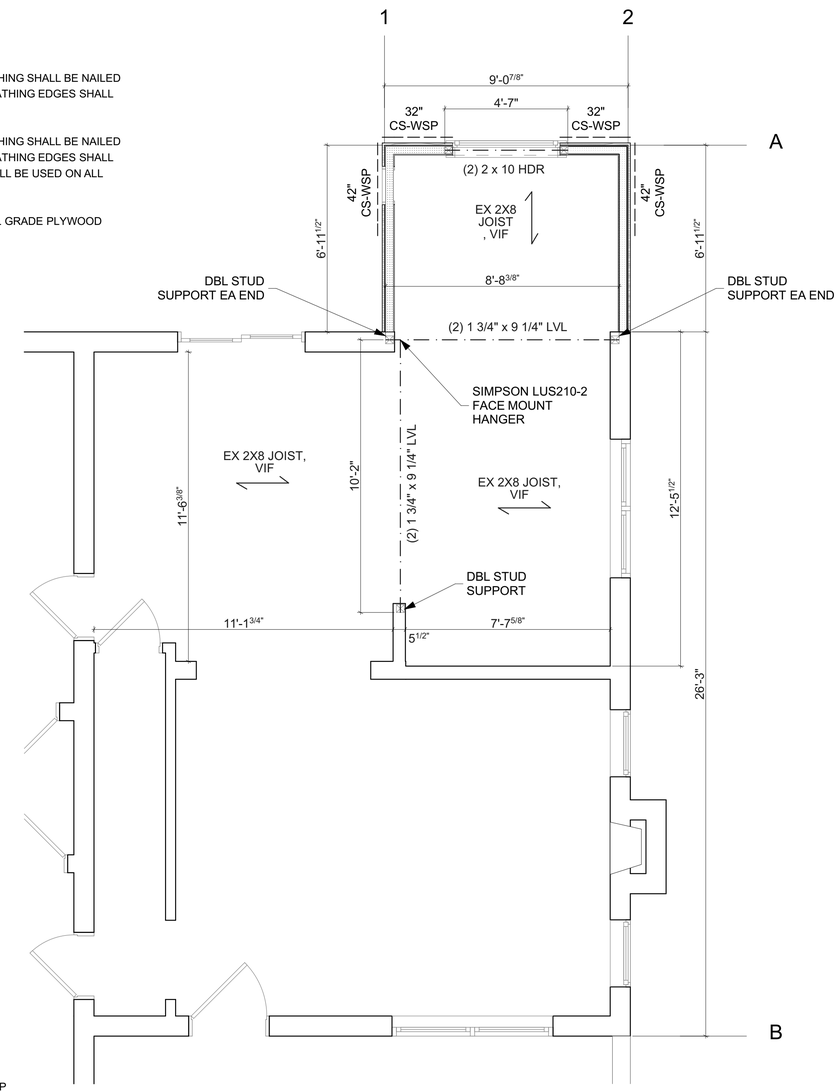
1. BRACED WALL PANEL, CS-WSP: EXTERIOR SHEATHING SHALL BE NAILED WITH 8D NAILS AT 6" OC EDGES, 12" OC FIELD. SHEATHING EDGES SHALL BE BLOCKED

2. BRACED WALL PANEL, CS-WSP: EXTERIOR SHEATHING SHALL BE NAILED WITH 8D NAILS AT 6" OC EDGES, 12" OC FIELD. SHEATHING EDGES SHALL BE BLOCKED. STRUCTURAL PANEL SHEATHING SHALL BE USED ON ALL SHEATHABLE AREAS OF THE BRACED WALL LINE.

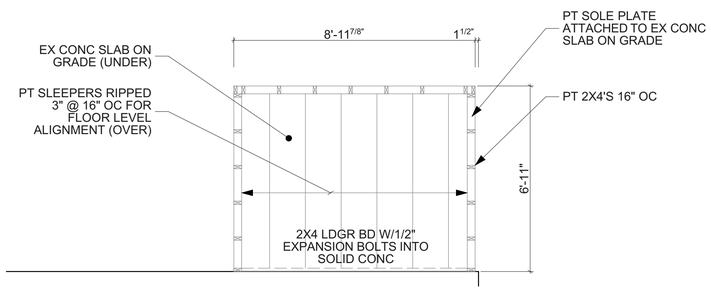
3. WALL SHEATHING SHALL BE MIN 1/2" STRUCTURAL GRADE PLYWOOD



Structural Framing @ Storage Loft — 1. / S1.1
3/8" = 1'-0"

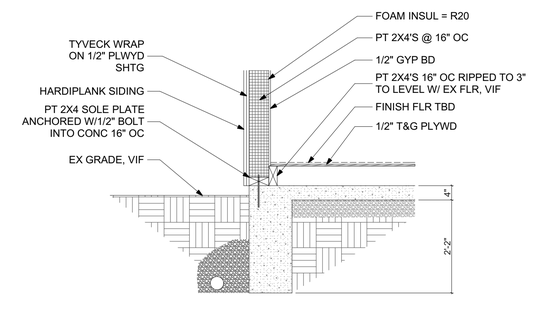


Partial Framing @ 2nd Floor — 3. / S1.1
3/8" = 1'-0"

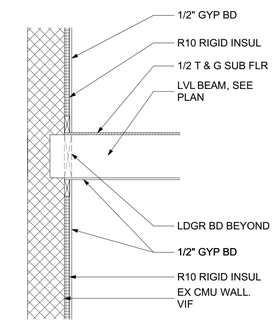


Floor Framing @ Sunroom Area — 2. / S1.1
3/8" = 1'-0"

PERIMETER DRAIN:
PROVIDE 1' THICK VERTICAL LAYER OF # 57 CLEAN STONE OR GRAVEL WRAPPED IN FILTER FABRIC AND TERMINATING MINIMUM 1' BELOW FINAL FINISHED GRADE. THE TOP 1' WILL BE COMPACTED CLAYEY SOIL BLANKET SLOPED AWAY FROM THE WALL MINIMUM ½"/FT. THE VERTICAL STONE/GRAVEL LAYER WILL MEET STONE/GRAVEL SURROUNDING PERFORATED DRAIN. THE DRAIN BOTTOM WILL BE SET ON 3" THICK LAYER OF COMPACTED STONE/GRAVEL ABOVE THE BOTTOM OF FOOTING LINE EXTENDED. THE STONE/GRAVEL WILL BE 10" THICK LAYER MEASURED FROM VERTICAL FACE OF THE FOOTING TO DRAIN AND 10" ON THE OTHER SIDE. THE STONE/ GRAVEL ABOVE THE DRAIN WILL MEET GRAVEL/STONE VERTICAL LAYER BEHIND THE WALL. ALL STONE WILL BE WRAPPED IN FILTER FABRIC. THE DRAIN WILL DISPOSE OFF TO DAYLIGHT OR TO A SUMP PIT FROM WHERE IT IS PUMPED TO GRADE OR INTO BUILDING STORMWATER DRAINAGE SYSTEM.



Detail: @ EX CONC SLAB FLR — 4. / S1.1



Detail: @ LVL BEAM — 5. / S1.1

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Structural Framing @ Storage Loft, Floor Framing @ Sunroom Area, Detail: @ EX CONC SLAB FLR, Detail: @ LVL BEAM, Partial Framing @ 2nd Floor

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

S1.1

I. GENERAL MECHANICAL NOTES

A. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST ISSUE 2017 IRC & IMC CODE, NFPA REGULATIONS, LOCAL FIRE MARSHAL'S OFFICE, REGULATIONS OF LOCAL AUTHORITIES HAVING JURISDICTION AND THE OWNERS INSURANCE UNDERWRITER.

B. FURNISH AND INSTALL ALL LABOR, MATERIAL, AND EQUIPMENT AND SERVICES NECESSARY FOR COMPLETE AND SAFE INSTALLATION OF THE MECHANICAL SYSTEM(S) INDICATED ON THE DRAWINGS AND NOTED IN THE SPECIFICATIONS HEREINAFTER.

C. MECHANICAL DRAWINGS ARE CONSIDERED DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK AND SYSTEMS. REFER TO ARCHITECTURAL DRAWINGS TO VERIFY LOCATION OF EQUIPMENT, ETC. CONTRACTOR SHALL EXAMINE ALL DRAWINGS RELATED TO THIS AND OTHER TRADES, AND SHALL BE FULLY INFORMED AS TO THE EXTENT OF THIS CONTRACT AND INCLUDED WORK ON PLANS IN OTHER TRADES.

D. QUALITY OF MATERIALS SHALL BE NEW, BEST OF THEIR RESPECTIVE KIND, FREE FROM DEFECTS AND LISTED BY ARI OR APPROPRIATE TESTING AGENCY.

E. SUBMIT THREE (3) COPIES OF SHOP DRAWINGS FOR ALL NEW EQUIPMENT AND MATERIALS. OBTAIN APPROVAL BEFORE EQUIPMENT IS ORDERED, BUILT, OR INSTALLED.

F. PERFORM TESTS AS NOTED AND/OR REQUIRED, IN PRESENCE OF THE OWNER'S REPRESENTATIVE. PROVIDE ALL REQUIRED LABOR AND MATERIAL. REPAIR OR REPLACE DEFECTIVE WORK AS DIRECTED.

G. THE CONTRACTOR AGREES THAT HE AND HIS SUBCONTRACTORS WILL PROVIDE AND MAINTAIN A SAFE PLACE TO WORK AND WILL COMPLY WITH ALL LAWS AND REGULATIONS OF ANY GOVERNMENTAL AUTHORITIES HAVING JURISDICTION THEREOF. THE CONTRACTOR AGREES TO HOLD HARMLESS, THE ENGINEER AND OWNER FROM ANY LIABILITY, LOSS, DAMAGE OR EXPENSE, ARISING FROM A FAILURE OR ALLEGED FAILURE ON THE PART OF THE CONTRACTOR, OR SUBCONTRACTORS TO PROVIDE AND MAINTAIN A SAFE PLACE TO WORK OR TO COMPLY WITH LAWS AND REGULATIONS OF GOVERNMENTAL AUTHORITIES HAVING JURISDICTION THEREOF.

H. THE CONTRACTOR SHALL SUPPLY TO THE OWNER RELEVANT DRAWINGS, MANUALS AND A WRITTEN NARRATIVE OF SYSTEMS OPERATION AS A CONDITION OF COMPLETION OF WORK AND PRIOR TO FINAL PAYMENT.

II. DUCT, PIPE, & EQUIPMENT INSTALLATION NOTES

A- FURNISH AND INSTALL NEW DUCTWORK AS SHOWN ON THE DRAWINGS (DIMENSIONS SHOWN ARE CLEAR INSIDE DIMENSION OF DUCT). ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH THE 1985 EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE (SDCS), THE ASHRAE GUIDE AND DATA "HANDBOOK OF FUNDAMENTALS" (LATEST EDITION) AND NFPA 90A "STANDARD FOR THE INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS" (LATEST EDITION). DUCTWORK SHALL BE SUITABLE FOR PRESSURES UP TO 2" WG AT VELOCITIES UP TO 2500 FPM.

B- PROVIDE REQUIRED SUPPORTS AND HANGERS FOR DUCTWORK, PIPING AND EQUIPMENT, SUCH THAT LOADING WILL NOT EXCEED ALLOWABLE LOADING OF STRUCTURE. SUBMITTAL OF A BID SHALL BE DEEMED A REPRESENTATION THAT THE CONTRACTOR SUBMITTING SUCH BID HAS ASCERTAINED ALLOWABLE LOADINGS AND HAS INCLUDED IN HIS ESTIMATES, THE COSTS ASSOCIATED IN FURNISHING REQUIRED SUPPORTS. ALL DUCTWORK, PIPING AND EQUIPMENT SUPPORTS SHALL BE INDEPENDENT OF THE CEILING SUPPORT SYSTEM.

C- CAREFULLY CHECK THE DOCUMENTS TO ASCERTAIN THE REQUIREMENTS OF ANY MATERIALS OR EQUIPMENT BEING FURNISHED OR FURNISHED AND INSTALLED AND PROVIDE THE PROPER INSTALLATION OR CONNECTIONS INCLUDING CONTROLS.

D- PROVIDE 1" ACOUSTIC LINING IN THE MAIN SA & RA DUCTS TO 10 FT OF THE AIR HANDLER.

E- INSTALL EXTERNAL DUCTWRAP INSULATION WITH VAPOR BARRIER ON ALL SUPPLY AND RETURN DUCT THAT IS NOT LINED AS SHOWN IN INUSLATION SCHEDULE.

F- PROVIDE AND INSTALL FLEX CONNECTIONS BETWEEN ALL AIR HANDLERS / AIR FANS AND THE DUCT WORK.

G- REFRIGERANT PIPES SHALL BE COPPER TYPE-L FOR REFRIGERATION APPLICATIONS. CONNECTIONS SHALL BE EITHER COMPRESSION OR SWEAT TYPE. INSULATE REFRIGERANT SUCTION WITH RUBATEX R-18000RS, ARMSTRONG TYPE II OR APPROVED EQUAL CLOSED CELL INSULATION SIZED IN ACCORDANCE WITH MANUFACTURES RECOMMENDATION. SEAL ALL BUTT JOINTS USING THE MANUFACTURER'S RECOMMENDED ADHESIVE. THE INSULATION, WHERE EXPOSED TO THE OUTDOORS, SHALL BE FINISHED WITH TWO COATS OF MANUFACTURER'S FINISH COATING, VINYL-LACQUER COATING OR APPROVED EQUAL.

H- CONDENSATE PIPING SHALL BE PVC OR COPPER TYPE L.

I- FURNISH AND INSTALL PREMOLDED FIBERGLASS PIPE INSULATION/VAPOR BARRIER ON ALL PIPING LISTED BELOW.

PIPING TYPE	INSULATION THICKNESS
A/C CONDENSATE	1/2"

J- VOLUME DAMPERS: PROVIDE ADJUSTABLE DAMPERS AT ALL DUCTWORK JUNCTIONS ON LOW PRESSURE SUPPLY DUCTWORK.

K- FLEXIBLE DUCT: FLEX DUCT SHALL BE INSULATED TYPE CLASSIFIED AS CLASS 1 AIR DUCT IN ACCORDANCE WITH UL 7181, MAXIMUM 10 FEET IN LENGTH. PROVIDE SPIN-IN DUCT TAP WITH VOLUME DAMPER FOR EACH FLEX DUCT. PROVIDE RIGID ROUND DUCT ON LENGTH OF RUNS OVER 10 FEET.

L- COORDINATION: COORDINATE WITH OTHER DISCIPLINES (INCLUDING PLUMBING, ELECTRICAL, CIVIL/SITE, STRUCTURAL, AND ARCHITECTURAL) FOR AVAILABLE SPACE, SEQUENCE OF INSTALLATION, AND INSTALLATION REQUIREMENTS PRIOR TO COMMENCING CONSTRUCTION, ADVISE THE ARCHITECT OF ANY CHANGES IN THE CONTRACT DOCUMENTS THAT MAY BE REQUIRED FOR WORK COMPLETION. VERIFY ADEQUATE CLEARANCES REGARDING DUCTWORK, PLUMBING, HVAC PIPING, AND ELECTRICAL PRIOR TO FABRICATION.

M- SIZES: WHEN PIPE OR DUCT SIZE IS NOT INDICATED, SIZE THAT SECTION EQUAL TO THE ADJACENT UPSTREAM SIZE, UNLESS OTHERWISE APPROVED BY THE THE ENGINEER, DUCT RUNOUTS SHALL BE MINIMALLY SIZED ACCORDING TO NECK SIZE OF THE RESPECTIVE DIFFUSER.

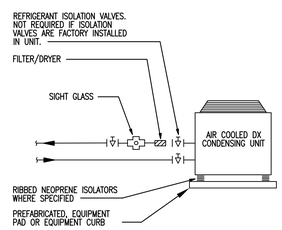
N- CONTRACTOR SHALL INSPECT ALL DUCT WORK, FITTINGS, INSULATION AND VAPOR BARRIER FOR DEFECTS OR LEAKAGE AND SEAL, CAP, REINSULATE, AND TAPE OVER AS REQUIRED TO PROVIDE REASONABLY WELL SEALED DUCT SYSTEM WITH APPROPRIATE INSULATION AND VAPOR BARRIER.

O- ALL PRESSURIZED PIPING SHALL BE LEAK TESTED PRIOR TO ENCLOSURE OR COVER-UP. PIPING SHALL BE LEAK TESTED FOR 24 HOURS UNDER A HYDROSTATIC PRESSURE OF 150% OF THE SYSTEM DESIGN WORKING PRESSURE. CARE SHALL BE TAKEN TO PROTECT ANY EQUIPMENT WHICH MAY BE DAMAGED BY HYDROSTATIC TESTING.

P- ALL SYSTEMS AND EQUIPMENT INSTALLED ON THE PROJECT SHALL BE BALANCED AND/OR ADJUSTED TO PROVIDE PROPER OPERATION OR FUNCTION IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS, AND MANUFACTURER'S RECOMMENDATIONS. ALL TEMPERATURE CONTROL, AIR AND WATER BALANCING SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR. ALL TEST AND BALANCE RESULTS SHALL BE DOCUMENTED WITH A COPY SUBMITTED TO THE OWNER FOR RECORD.

MECHANICAL ABBREVIATIONS AND SYMBOLS

AHU	AIR HANDLING UNIT	SUPPLY AIR DIFFUSER
AMB	AMBIENT	RETURN AIR OR EXHAUST GRILL
BLDG	BUILDING	
BTU	BRITISH THERMAL UNIT	FLEXIBLE DUCT
CFM	CUBIC FEET PER MINUTE	
DIA	DIAMETER	FLEXIBLE DUCT CONNECTION
DIFF	DIFFUSER	
DN	DOWN	SUPPLY OR OUTSIDE AIR DUCT UP
DWG	DRAWING	
EA	EXHAUST AIR	SUPPLY OR OUTSIDE AIR DUCT DOWN
EF	EXHAUST FAN	RETURN, OR EXHAUST AIR DUCT UP
EWH	ELECTRIC WALL HEATER	
EX	EXISTING	RETURN OR EXHAUST AIR DUCT DOWN
EA	EXHAUST AIR	
F	FAHRENHEIT, FAN	
FLEX	FLEXIBLE	DRAWING NOTE REFERENCE
FT	FOOT, FEET	
HP	HORSE POWER	MECHANICAL EQUIPMENT REFERENCE, 'a' DENOTES TYPE, 'b' DENOTES NUMBER
HTG	HEATING	
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	AIR DISTRIBUTION DEVICE REFERENCE,'a' DENOTES TYPE, 'b' DENOTES CFM, 'c/d' DENOTES NECK SIZE
HZ	HERTZ	
IN	INCH	
KW	KILOWATT	DUCT SMOKE DETECTOR
MAX	MAXIMUM	VOLUME DAMPER
MBH	THOUSANDS OF BTU'S	
MECH	MECHANICAL	SPIN-IN FITTING
NTS	NOT TO SCALE	
OA	OUTSIDE AIR	MOTORIZED CONTROL DAMPER
OE RA	OPEN END RETURN	
PH	PHASE	THERMOSTAT OR ROOM TEMPERATURE SENSOR
RA	RETURN AIR	
RPM	REVOLUTIONS PER MINUTE	CO2 SENSOR
SA	SUPPLY AIR	
SP	STATIC PRESSURE	
TFR	TRANSFER AIR	CONNECT TO EXISTING
TEF	TOILET EXHAUST FAN	
TOT	TOTAL	
TSTAT	THERMOSTAT	EXISTING DUCT
TYP	TYPICAL	
VD	VOLUME DAMPER	
W	WATT, WIDTH	NEW DUCT
W/	WITH	
W/O	WITHOUT	

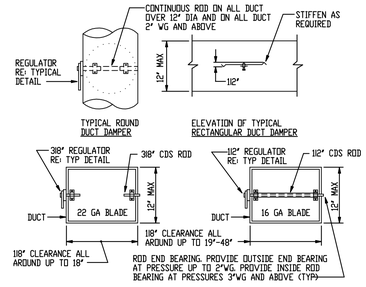


1 M1.0 TYPICAL CONDENSING UNIT PIPING DETAIL
SCALE: N.T.S.

DUCT CONSTRUCTION SPECIFIED GAGE THICKNESS AND REINFORCEMENT							
DIMENSION OF LONGEST SIDE (INCHES)	SHEET METAL GAUGE (ALL FOUR SIDES)	TRANSVERSE REINFORCING (1)					
		MINIMUM REINFORCING ANGLE SIZE AND MAXIMUM LONGITUDINAL SPACING BETWEEN TRANSVERSE JOINT &/OR INTERMEDIATE REINFORCING	AT JOINTS				
			MIN H (INCHES)	DRIVE SLIP / PLAIN S SLIP	HEMMED S SLIP	PLAIN S SLIP	REINFORCED BAR SLIP
UP THRU 12	26	NONE REQUIRED	1	26	26	26	24
13-18	24	NONE REQUIRED	1	24	24	24	24
19-30	24	1"x1"x1/8" @ 60"	1	–	24	24	24
31-36	22	1"x1"x1/8" @ 60"	1	–	–	22	22

(1) TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIDE TO WHICH ANGLE IS APPLIED.

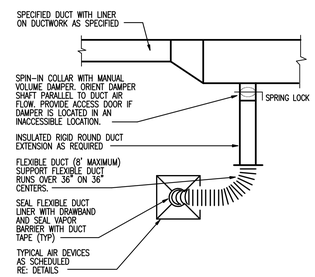
(2) LONGITUDINAL JOINTS TO BE PITTSBURG OR SNAP LOCK TYPE.



TYPICAL RECTANGULAR DUCT DAMPER

SINGLE BLADE BALANCING DAMPERS MAY BE USED IN ROUND DUCT AND IN RECTANGULAR DUCT UP TO A MAXIMUM DUCT SIZE OF 12" H x 48" W

2 M1.0 TYPICAL DUCT MOUNTED SINGLE BLADE BALANCING DAMPERS
SCALE: N.T.S.



3 M1.0 TYPICAL AIR DEVICE FLEXIBLE CONNECTION
SCALE: N.T.S.

EXTERIOR DESIGN CONDITIONS	
CONDITION	VALUE
WINTER DESIGN DRY-BULB (°F)	10
SUMMER DESIGN DRY-BULB (°F)	95
SUMMER DESIGN WET-BULB (°F)	76
DEGREE DAY HEATING	4500
DEGREE DAY COOLING	1200

1. DESIGN VALUES INDICATED ARE GENERALLY ACCEPTABLE NORTHEN VIRGINIA AND WASHINGTON DC AREA.

DUCT INSULATION SCHEDULE		
SERVICE	LOCATION	MINIMUM R-VALUE
SUPPLY AIR	UNCONDITIONED ATTIC OR OUTSIDE OF BUILDING	8
RETURN AIR		6
TRANSFER AIR		6
OUTDOOR AIR		6
SUPPLY AIR	UNCONDITIONED SPACES INCLUDING BASEMENTS, CRAWL SPACES, GARAGES AND ABOVE CEILINGS	6
RETURN AIR		3.5
TRANSFER AIR		3.5
OUTDOOR AIR		3.5

1. VALUES ARE BASED ON 2012 IECC REQUIREMENTS, 4500 HEATING DEGREE DAY TYPICAL FOR NORTHERN VIRGINIA, AND WASHINGTON DC AREA AND GENERAL GOOD PRACTICE.

2. UNCONDITIONED SPACES REFERS TO SPACES THAT SEPARATE CONDITIONED SPACE FROM OUTSIDE I.E. VENTILATED CRAWL SPACES; FRAMED CAVITIES WITHIN EXTERIOR WALLS; OR CEILING ASSEMBLIES SEPARATING CONDITIONED FLOOR SPACE FROM UNCONDITIONED ATTIC.

3. WHERE REQUIRED AS SPECIFIED IN NOTES OR DRAWINGS DUCT LINER SHALL BE INSTALL OF EQUAL VALUE TO REQUIRED INSULATION R-VALUE OR SO THAT THE COMBINED R-VALUE OF DUCT LINER PLUS INSULATION MEETS OR EXCEEDS VALUES INDICATED ABOVE.

NOTES:

1. METALLIC FLEXIBLE DUCTWORK SHALL BE ATTACHED USING A MIN OF THREE #8 SHEET METAL SCREWS EQUALLY SPACED AROUND THE DUCTWORK CIRCUMFERENCE. DUTWORK LARGER THAN 12" SHALL HAVE A MIN OF FIVE #8 SHEET METAL SCREWS. SCREWS SHALL BE LOCATED AT LEAST 1" FROM THE DUCTWORK END.

2. NON-METALLIC FLEXIBLE DUCTWORK SHALL BE SECURED TO THE SLEEVE OR COLLAR USING A DRAW BAND. IF THE DUCTWORK COLLAR EXCEEDS 12", THE DRAW BAND MUST BE POSITIONED BEHIND A BEAD ON THE METAL COLLAR.

3. INSULATION AND VAPOR BARRIERS PRESENT ON THE FACTORY-FABRICATED DUCTWORK SHALL BE FITTED OVER THE CORE CONNECTION AND SHALL BE SUPPLEMETALLY SECURED WITH A DRAW BAND.

4. FLEXIBLE DUCTWORK SEALING SHALL BE A CLASS 'B' SEAL FOR LOW PRESSURE DUCTWORK.

5. SUPPORT SYSTEM SHALL NOT DAMAGE OR CAUSE OUT OF ROUND SHAPE

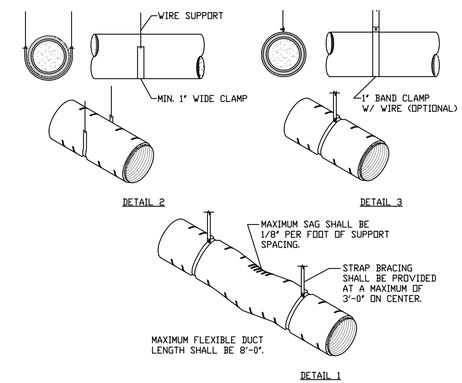
6. FLEXIBLE DUCTWORK SHALL BE A MAX OF 8'-0" IN LENTH AND SHALL NOT BE USED AS AN ELBOW

7. MECHANICAL SYSTEM PIPING CAPABLE OF CARRYING FLUIDS ABOVE 105 °F (41 °C) OR BELOW 55 °F (13 °C) SHALL BE INSULATED TO A MIN OF R-3

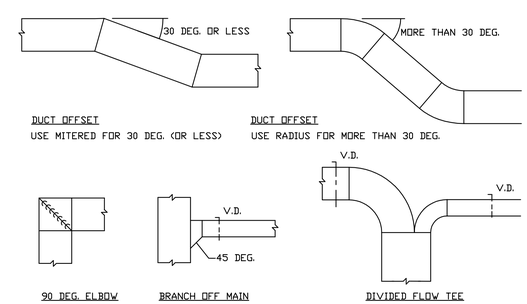
8. PIPING INSULATION EXPOSED TO THE WEATHER SHALL BE PROTECTED FROM DAMAGE, INCLUDING THAT CAUSED BY SUNLIGHT, MOISTURE, EQUIPMENT MAINTENANCE, AND WIND, AND SHALL PROVIDE SHIELDING FROM THE SOLAR RADIATION THAT CAN CAUSE DEGRADATION OF THE MATERIAL. ADHVESIVE TAPE SHALL NOT BE PERMITTED.

9. INSULATION FOR HOT WATER PIPE WITH A MINIMUM THERMAL RESISTANCE (R-VALUE) OF R-3 SHALL BE APPLIED TO THE FOLLOWING:
   1. PIPING LARGER THAN 3/4-INCH NOMINAL DIAMETER.
   2. PIPING SERVING MORE THAN ONE DWELLING UNIT.
   3. PIPING FROM THE WATER HEATER TO KITCHEN OUTLETS.
   4. PIPING LOCATED OUTSIDE THE CONDITIONED SPACE.
   5. PIPING FROM THE WATER HEATER TO A DISTRIBUTION MANIFOLD.
   6. PIPING LOCATED UNDER A FLOOR SLAB.
   7. BURIED PIPING.
   8. SUPPLY AND RETURN PIPING IN RECIRCULATION SYSTEMS OTHER THAN DEMAND RECIRCULATION SYSTEMS.
   9. PIPING WITH RUN LENGTHS GREATER THAN THE MAXIMUM RUN LENGTHS FOR THE NOMINAL PIPE DIAMETER GIVEN IN TABLE 403.4.2.

ALL REMAINING PIPING SHALL BE INSULATED TO AT LEAST R-3 OR MEET THE RUN LENGTH REQUIREMENTS OF TABLE R403.4.2.



4 M1.0 INSULATED FLEXIBLE DUCTWORK DETAIL
SCALE: N.T.S.



5 M1.0 SHEET METAL FITTINGS (LOW VELOCITY) DETAILS
SCALE: N.T.S.

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Mechanical HVAC Notes

Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

M0.1

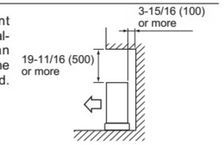
NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2017 INTERNATIONAL FUEL GAS CODE, REGULATIONS OF LOCAL AUTHORITIES HAVING JURISDICTION AND THE OWNERS INSURANCE UNDERWRITER.
2. FURNISH AND INSTALL ALL LABOR, MATERIAL, AND EQUIPMENT AND SERVICES NECESSARY FOR COMPLETE AND SAFE INSTALLATION OF THE PLUMBING SYSTEM(S) INDICATED ON THE DRAWINGS AND NOTED IN THE SPECIFICATIONS HEREINAFTER.
3. OBTAIN AND PAY FOR ALL INSPECTIONS, LICENSES, PERMITS AND APPROVALS REQUIRED BY GOVERNING AUTHORITIES AND INSTALL ALL WORK IN COMPLIANCE THEREOF.
4. THESE DRAWINGS ARE CONSIDERED DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF WORK AND SYSTEMS. ALL PIPING AND SYSTEMS SHOWN SCHEMATIC. IT IS NOT POSSIBLE TO INDICATE EVERY OFFSET, ELBOW, UNION, VALVE, TRAP, ACCESS PANEL, ETC. THAT IS REQUIRED FOR A PROPER WORKING SYSTEM. NO ADDITIONAL COST WILL BE ALLOWED FOR FITTINGS THAT ARE REQUIRED TO INSTALL THE ENTIRE GAS SYSTEM IN THE SPACE PROVIDED AND NECESSARY FOR A COMPLETE WORKING SYSTEM.
5. REFER TO ARCHITECTURAL DRAWINGS TO VERIFY LOCATION OF EQUIPMENT, ETC.
6. CONTRACTOR SHALL EXAMINE ALL DRAWINGS RELATED TO THIS AND OTHER TRADES, AND SHALL BE FULLY INFORMED AS TO THE EXTENT OF THIS CONTRACT AND OVERALL INCLUDED WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR TRADE COORDINATION AND SHALL COMMUNICATE ADEQUATELY WITH ALL OTHER DISCIPLINES AS REQUIRED TO MAKE CLEARANCE ALLOWANCES AS REQUIRED BY ALL TRADES TO AVOID INTERFERENCE OF DISCIPLINES.
7. THE CONTRACTOR SHALL CONNECT ALL ITEMS OF EQUIPMENT FURNISHED BY OTHERS AND UNDER OTHER SECTIONS OF THE SPECIFICATIONS, CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO COMPLETE THE GAS INSTALLATION.
8. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES, ETC. PROVIDE UNIONS FOR ALL PIPING CONNECTIONS TO EQUIPMENT. ALL EXPOSED PIPING AND FITTINGS SHALL BE CHROME PLATED.
9. QUALITY OF MATERIALS SHALL BE NEW, BEST OF THEIR RESPECTIVE KIND, FREE FROM DEFECTS..
10. PROVIDE ALL REQUIRED LABOR AND MATERIAL. REPAIR OR REPLACE DEFECTIVE WORK AS DIRECTED.
11. ALL VALVES AND ACCESSORIES SERVING EQUIPMENT SHALL BE INSTALLED TO ALLOW PROPER SERVICING AND/OR REMOVAL WITHOUT DISCONNECTING ALL PIPING AND ACCESSORIES.
12. INSTALLATION OF EQUIPMENT, PIPING, WIRING, ETC., SHALL BE DONE IN NEAT AND WORKMANLIKE MANNER AND SHALL CONFORM TO THE LATEST TRADE PRACTICES. WATER PIPING AND SANITARY DRAIN LINES SHALL BE RUN CONCEALED IN WALL ABOVE CEILING OR BENEATH FLOOR WHEREVER, POSSIBLE. EACH FIXTURE SHALL BE COMPLETE WITH ALL TRIM, ANGLE STOPS, ESCUTCHEONS, TRAPS AND TAIL PIECES. ALL EXPOSED TRIM SHALL BE CHROME PLATED. ALL FIXTURES SHALL BE PROPERLY SUPPORTED AND INSTALLED. ATTACHMENTS SHALL BE OF STRONG AND DURABLE NATURE.
13. CONNECTION OF DISSIMILAR PIPING MATERIALS SHALL BE MADE BY MEANS OF DI-ELECTRIC FITTINGS.
14. NATURAL GAS PIPING, 3" AND SMALLER, INTENDED FOR OPERATION AT PRESSURES LESS THAN 5 PSIG SHALL BE ASTM A53, SCHEDULE 40, BLACK STEEL JOINED BY CLASS 150 SOCKET WELD FITTINGS EXCEPT THAT CLASS 150, BANDED, BLACK MALLEABLE IRON, THREADED FITTINGS MAYBE USED AT VALVES AND EQUIPMENT CONNECTION. PROVIDE CONDENSATION TRAPS WITH REMOVABLE CAPS AT ALL EQUIPMENT CONNECTIONS.
15. NATURAL GAS PIPING: SCHEDULE 40 BLACK STEEL PIPE (ASTM A53) WITH 150 PSI FITTINGS AND WELDED JOINTS.
16. BUILDING WILL BE TESTED FOR COMBUSTION APPLIANCE COMPLIANCE IN ACCORDANCE WITH THE IECC 2015, APPENDIX RB. COMBUSTION APPLIANCE ZONE (CAZ) SHALL BE TESTED FOR SPILLAGE, ACCEPTABLE DRAFT AND CARBON MONOXIDE CO.
    EXCEPTIONS:
    1. POWER-VENTED EQUIPMENT AND APPLICANCES
    2. FIREPLACES AND STOVES COMPLYING WITH SECTION R402.4.2 AND SECTION R1006 OF IRC 2017
17. HEATED WATER CIRCULATION SYSTEMS SHALL BE PROVIDED WITH A CIRCULATION PUMP. THE SYSTEM RETURN PIPE SHALL BE A DEDICATED RETURN PIPE OR A COLD WATER SUPPLY PIPE. GRAVITY AND THERMOSYPHON CIRCULATION SYSTEMS SHALL BE PROHIBITED. CONTROLS FOR CIRCULATING HOT WATER SYSTEM PUMPS SHALL START THE PUMP BASED ON THE IDENTIFICATION OF A DEMAND FOR HOT WATER WITHIN THE OCCUPANCY. THE CONTROLS SHALL AUTOMATICALLY TURN OFF THE PUMP WHEN THE WATER IN THE CIRCULATION LOOP IS AT THE DESIRED TEMPERATURE AND WHEN THERE IS NO DEMAND FOR HOT WATER.
18. A WATER DISTRIBUTION SYSTEM HAVING ONE OR MORE RECIRCULATION PUMPS THAT PUMP WATER FROM A HEATED WATER SUPPLY PIPE BACK TO THE HEATED WATER SOURCE THROUGH A COLD WATER SUPPLY PIPE SHALL BE A DEMAND RECIRCULATION WATER SYSTEM. PUMPS SHALL HAVE CONTROLS THAT COMPLY WITH BOTH OF THE FOLLOWING:
    1. THE CONTROL SHALL START THE PUMP UPON RECEIVING A
    SIGNAL FROM THE ACTION OF A USER OF A FIXTURE OR APPLIANCE, SENSING THE PRESENCE OF A USER OF A FIXTURE OR SENSING THE FLOW OF HOT OR TEMPERED WATER TO A FIXTURE FITTING OR APPLIANCE.
    2. THE CONTROL SHALL LIMIT THE TEMPERATURE OF THE WATER
    ENTERING THE COLD WATER PIPING TO 104°F (40°C)
19. ALL REFRIGERATORS, FREEZERS, DISHWASHERS, CLOTHES WASHERS, AND CEILING FANS MUST BE ENERGY STAR QUALIFIED, AND WATER HEATER(S) SHALL MEET THE MINIMUM EFFICIENCY REQUIREMENTS OF TABLE R405.5
20. BUILDINGS SHALL MEET THE MINIMUM AIR LEAKAGE REQUIREMENTS OF TABLE R405.4 AND INSTALL A HEAT OR ENERGY RECOVERY VENTILATION SYSTEM.

FREE SPACE REQUIRED AROUND OUTDOOR UNIT

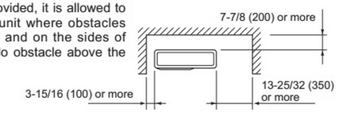
1. Obstacles above

When there is no obstacle in front and on the sides of the unit, it is allowed to install the unit where an obstacle is above the unit only if the space shown in the figure is provided.



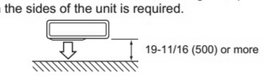
2. Front (blowing) side open

As long as space indicated in the figure is provided, it is allowed to install the unit where obstacles are behind and on the sides of the unit. (No obstacle above the unit)



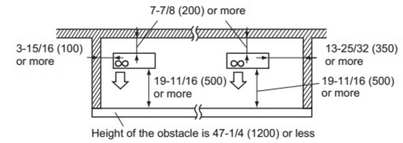
3. Obstacles in front (blowing) only

When there is an obstacle in front of the unit as shown in the figure, open space above, behind, and on the sides of the unit is required.



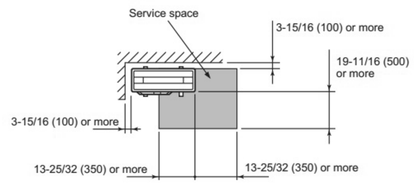
4. Obstacles in front, behind and on side(s)

- When installing the unit in an area that is enclosed with walls such as a verandah, be sure to have enough space as shown below.
  In this case, the air conditioning capacity and power consumption might deteriorate.
- When installing two or more units, do not install the units in front or behind each other.



5. Service space

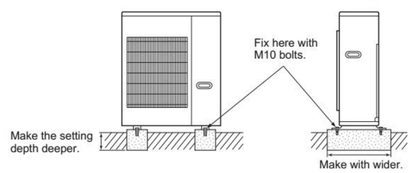
Provide space for service and maintenance as shown in the figure.

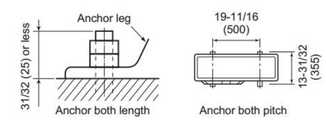


(Unit: inch (mm))

2-1. INSTALLING THE UNIT

- Be sure to fix the unit's legs with bolts when installing it.
- Be sure to install the unit firmly to ensure that it does not fall by an earthquake or a gust.
- Refer to the figure in the right for concrete foundation.
- Do not use the drain socket and the drain caps in the cold region. Drain may freeze and it makes the fan stop.





(Unit: inch (mm))

12,642 BTU or 3,705 Watts or 1.1 Ton

Size	318	square feet
Room Ceiling Height	11	feet
Number of People Inside Regularly	2	
Type	Living Room	
Insulation Condition	Average	
Sun Exposure	Average	
Climate	Average	

MECHANICAL LEGEND

- WALL CASSETTE UNIT
- REGISTER
- THERMOSTAT
- OUTDOOR CONDENSER UNIT

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Mechanical Notes & Details

Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

M1.1

MECHANICAL NOTES:

1. THE DRAWINGS CONVEY THE GENERAL INTENT OF THE DESIGN. CONTRACTOR SHALL EXAMINE THE SIDE AND ALL DRAWINGS BEFORE PROCEEDING WITH THE LAYOUT AND INSTALLATION OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR ASCERTAINING THE EXISTING CONDITIONS, LOCATIONS, RUNS, SIZES, MATERIALS, SLOPES, ETC.

2. ARRANGE THE WORK ESSENTIALLY AS SHOWN, EXACT LAYOUT TO BE MADE ON THE JOB TO SUIT ACTUAL CONDITIONS. CONFER AND COOPERATE WITH OTHER TRADES ON THE JOS SO ALL WORK WILL BE INSTALLED IN PROPER RELATIONSHIP. PRECISE LOCATION OF PARTS TO COORINDATE WITH OTHER WORK IS THE RESPONSIBILITY OF THE CONTTRACTOR

3. TOILET EXHAUST FANS WITH A RATED FLOOR/CEILING ASSMEMBLY SHALL BE WALL MOUNTED OR UNDER CEILING MOUNTED AND SHALL HAVE A FIRE DAMPER INSTALLED IN THE DISCHARGE DUCT AT EACH PENETRATION OF A RATED FLOOR/CEILING/WALL ASSEMBLY

4. ENSURE THAT TOILET ROOM DOORS ARE UNDERCUT ONE INCH TO ALLOW FOR MAKEUP AIR FOR THE EXHAUST.

5. FIRE DAMPERS SHALL BE INSTALLED AT ALL DUCT PENETRATIONS OF FIRE RATED WALLS. FIRE DAMPERS ARE NOT REQUIRED AT PENTRATIONS OF FLOORS FOR DUCTING ENCLOSED IN FIRE RATED CHASES

6. ALL FIRE DAMPERS SHALL BE ACCESSIBLE. PROVIDE ACCESS DOORS IN DUCTS AND ADJACENT FINISHES AS NEEDED.

7. THE CONDENSING UNIT SHALL BE INSTALLED ON PRECAST CONCRETE OR COMPOSITION PAD SUPPLIED BY THE MECHANICAL CONSTRACTOR.

8. CONSULT WITH HVAC UNIT MANUFACTURER FOR INSTALLATION REQUIREMENTS PRIOR TO INSTALL.

9. PROGRAMMABLE THERMOSTAT. WHERE THE PRIMARY HEATING SYSTEM IS A FORCED-AIR FURNACE, AT LEAST ONE THERMOSTAT PER DWELLING UNIT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE TO MAINTAIN DIFFERENT TEMPERATURE SET POINTS AT DIFFERENT TIMES OF THE DAY. THIS THERMOSTAT SHALL INCLUDE THE CAPABILITY TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55°F (13°C) OR UP TO 85°F (29°C). THE THERMOSTAT SHALL INITIALLY BE PROGRAMMED WITH A HEATING TEMPERATURE SET POINT NO HIGHER THAN 70°F (21°C) AND A COOLING TEMPERATURE SET POINT NO LOWER THAN 78°F (26°C).

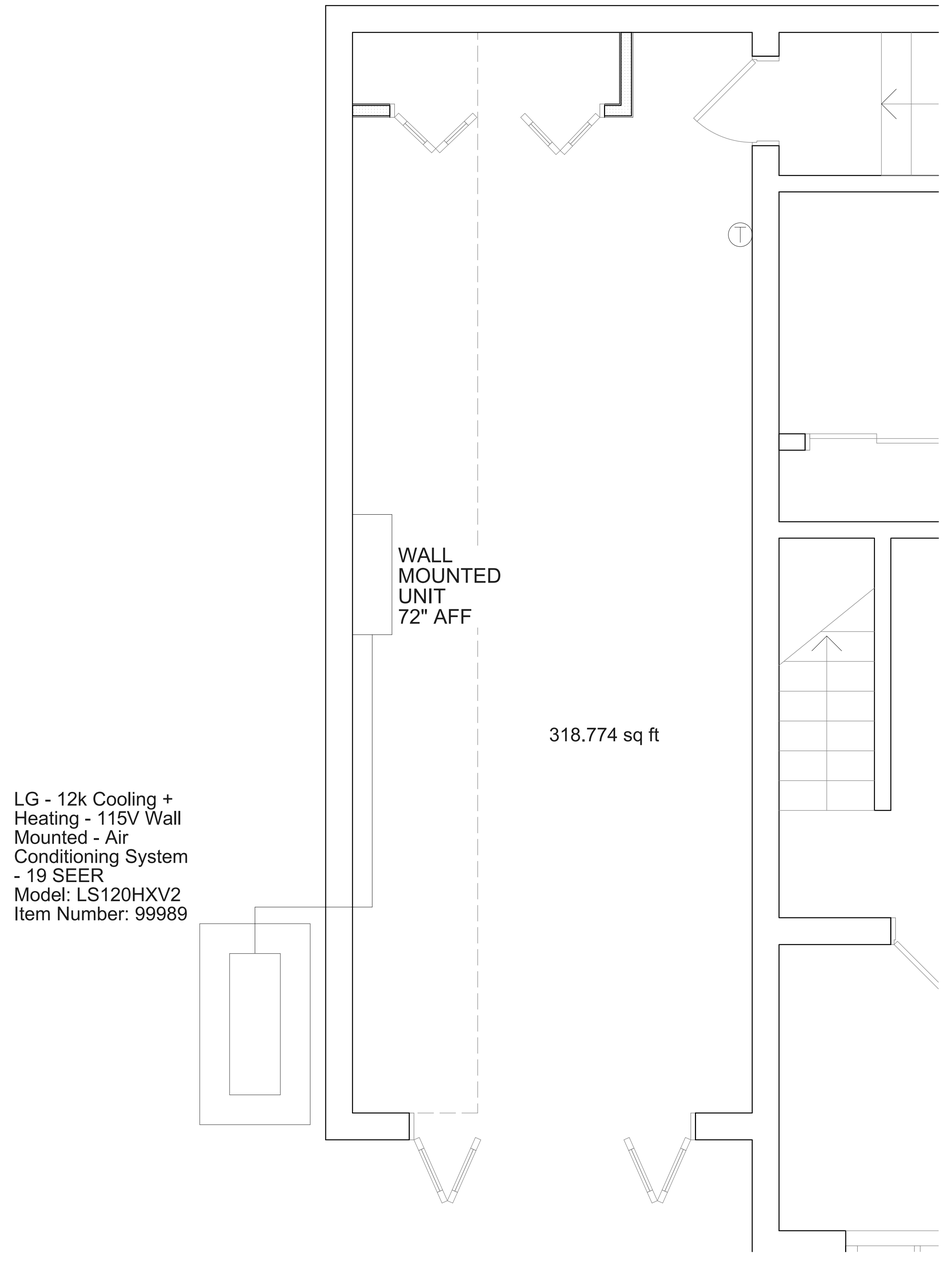
10. THIS PROJECT IS REQUIRED TO SUBMIT AT FINAL INSPECTION A DUCT LEAKAGE TEST SHOWING A PASSING RATING OF <= 8 CFM PER 100 SQUARE FEET CONDITIONED FLOOR AREA AT A PRESSURE OF 25 PASCAL. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL UPON REQUEST.

11. SEALING. DUCT SEALING - DUCTS, AIR HANDLERS, AND FILTER BOXES SEALED PER IRC/IMC AND TESTED - ROUGH-IN OR POST-CONSTRUCTION TESTING MUST DEMONSTRATE ≤ 4 CFM/100 SF, OR 4% CFA25. SEALED AIR HANDLER - MANUFACTURER'S DESIGNATION OF (MAX) 2% OF DESIGN AIRFLOW RATE

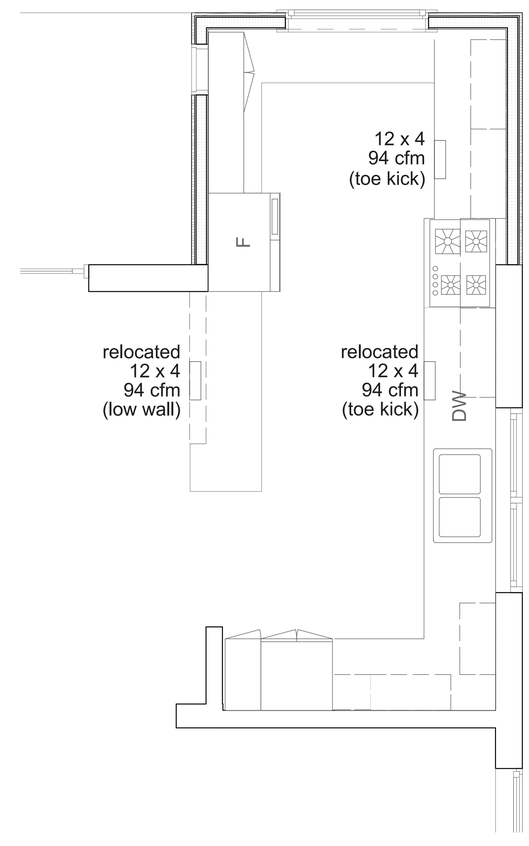
12. AUTOMATIC DAMPERS ARE INSTALLED IN ALL AIR INTAKES AND EXHAUSTS VENTS PER IMC AND IRC CODE

TESTING NOTES

1.A duct leakage test showing a passing rating of <= 8 CFM per 100 square feet conditioned floor area at a Pressure of 25 Pascal. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official.



Partial Basement HVAC Plan 1.
1/2" = 1'-0" M1.2



Partial First Floor HVAC Plan 2.
1/2" = 1'-0" M1.2

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Partial Basement HVAC Plan, Partial First Floor HVAC Plan

Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

M1.2

GENERAL NOTES

1. APPLICABLE CODES AND STANDARDS: PERFORM ALL WORK IN ACCORDANCE TO THE FOLLOWING CODES AND STANDARDS:
   A. INTERNATIONAL BUILDING CODE 2017.
   B. NATIONAL ELECTRICAL CODE 2017.
   C. INTERNATIONAL ENERGY CODE 2017.
   D. NATIONAL FIRE PROTECTION AGENCY (NFPA 72).

2. ELECTRICAL CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL ELECTRICAL EQUIPMENT WITH THE ARCHITECTURAL DRAWINGS.

3. ALL WORK SHALL BE ACCOMPLISHED WITHIN THE INTENT OF THE BASE BUILDING DRAWINGS AND GENERAL SPECIFICATIONS.

4. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION BETWEEN ALL TRADES PRIOR TO INSTALLATION. REPORT ANY DISCREPANCIES BETWEEN THE EXISTING EQUIPMENT AS INSTALLED AND INFORMATION AS SHOWN ON THE DRAWINGS, AS WELL AS NEW EQUIPMENT AS SPECIFIED W/ EQUIPMENT AS TO BE INSTALLED.

5. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID AND CONSTRUCTION TO VERIFY ALL EXISTING CONDITIONS, TELECOM AND UTILITY SERVICE. NO ADDITIONAL COST WILL BE ALLOWED AFTER THE BID.

6. EXISTING BASE BUILDING ELECTRICAL SYSTEMS ARE TO REMAIN EXCEPT WHERE MODIFICATIONS ARE REQUIRED AND AS SHOWN ON PLANS. MAINTAIN CONTINUITY OF EXISTING CIRCUITS.

7. ALL ELECTRICAL EQUIPMENT INCLUDING BUT NOT LIMITED TO CONDUIT, WIRE, BOXES, FITTINGS, SHALL BE NEW U.O.N. AND SHALL MEET NEMA STANDARD AND BEAR THE U.L. LABEL.

8. THE CONTRACTOR SHALL RESTORE ALL AREAS AND SYSTEMS DISTURBED BY HIS WORK TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER.

9. ALL WORK AND MATERIAL SHALL BE GUARANTEED FREE FROM DEFECTS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR, INCLUDING ALL REUSED EXISTING ELECTRICAL EQUIPMENT.

10. CIRCUIT CONTINUITY SHALL BE MAINTAINED FOR EXISTING ELECTRICAL EQUIPMENT TO REMAIN AND/OR BE RELOCATED.

11. CONDUIT RUNS ARE SHOWN SCHEMATICALLY, BUILDING CONDITIONS WILL DETERMINE THE ACTUAL CONDUITS RUN. CONDUITS SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.

12. COLOR CODE AND IDENTIFY ALL WIRES IN PULL BOXES AND PANELS.

13. ITEMS TO BE REMOVED: UNLESS OTHERWISE NOTED, CONTRACTOR SHALL PERFORM THE FOLLOWING:

    A. IF THE CONDUIT SERVING THE ITEM IS CONCEALED, THE CONTRACTOR SHALL REMOVE ALL CONDUCTORS, CUT CONDUIT BACK TO BELOW GRADE, FLOOR, OR ABOVE CEILING, AND PATCH TO MATCH EXISTING.
    B. IF THE CONDUIT SERVING THE ITEM IS EXPOSED, THE CONTRACTOR SHALL REMOVE CONDUIT AND CONDUCTORS BACK TO SOURCE.

14. ITEMS TO BE RELOCATED: UNLESS OTHERWISE NOTED, CONTRACTOR SHALL PERFORMED THE FOLLOWING:

    A. IF THE CONDUIT SERVING THE ITEM OR FEEDING OTHER ITEMS IS CONCEALED, THE CONTRACTOR SHALL REMOVE ALL CONDUCTORS, CUT CONDUIT BACK TO BELOW GRADE, FLOOR, OR CEILING, AND RE-FEED THESE ITEMS WITH NEW CONDUIT AND WIRE AS SHOWN ON THE DRAWING.
    B. IF THE CONDUIT SERVING THE ITEMS IS EXPOSED, THE CONTRACTOR SHALL REROUTE CONDUIT AND CONDUCTORS WHERE POSSIBLE OR RUN NEW CONDUIT AND CONDUCTORS AS MAY BE REQUIRED.
    C. IF AN ITEM IS TO BE REPLACED, THE CONTRACTOR SHALL RECONNECT ALL EXISTING CONNECTIONS.

15. EXACT LOCATION, MOUNTING HEIGHT, AND TYPE OF TERMINATION FROM JUNCTION BOXES, STUB-UPS, DISCONNECT SWITCHES, ETC. SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS, SHOP DRAWINGS, EQUIPMENT CUTS OR DETAILS BEFORE CONDUIT ROUGH-IN.

16. PROVIDE SINGLE COMMON COVER PLATE IN ALL AREAS WHERE DEVICES ARE GANGED MORE THAN TWO IN GROUP TOGETHER.

17. THE CONTRACTOR SHALL NOT CORE DRILL CONCRETE SLABS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE STRUCTURAL ENGINEERS AND THE BUILDING ENGINEERS.

18. CONTRACTOR TO SCAN PROPOSED CORE DRILL LOCATIONS WITH GPR DEVICE TO PREVENT CUTTING THROUGH CONCEALED RE-BARS AND/OR CONDUIT IN SOLID CONCRETE FLOOR SLAB.

20. PROVIDE DISCONNECT SWITCHES/STARTERS IF NOT FURNISHED INTEGRAL WITH THE MECHANICAL EQUIPMENT. SIZE DISCONNECT SWITCH/STARTER AS RECOMMENDED BY EQUIPMENT MANUFACTURER.

21. FIELD VERIFY EXISTING FIRE ALARM CONTROL PANEL. IF REQUIRED PROVIDE ACCESSORIES TO ACCOMMODATE NEW DEVICES.

22. CONTRACTOR SHALL VERIFY ALL EQUIPMENT REQUIREMENTS BEFORE INSTALLING CONDUIT OR CONDUCTORS FROM POWER SOURCE TO EQUIPMENT TERMINATION.

23. ALL WIRE SIZES ARE BASED ON COPPER CONDUCTORS.

24. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR PROPER FUNCTION OF THE SYSTEM.

25. ALL WIRING SHALL BE INSTALLED IN CONDUIT. CONDUCTORS SHALL BE TYPE THHN OR THWN. MINIMUM WIRE SIZE SHALL BE #12 AWG. MINIMUM CONDUIT SIZE SHALL BE 3/4". THE USE OF TYPE AC CABLE IS PERMISSIBLE.

26. PANELBOARDS: PANELBOARDS SHALL BE INDICATED ON SCHEDULE, WITH BOLT-ON, BRANCH CIRCUIT BREAKERS AND COPPER BUSS OR MATCH BASE BUILDING DISTRIBUTION EQUIPMENT.

27. WALL PLATES:
    A. MATERIAL FOR FINISHED SPACES: SMOOTH, HIGH-IMPACT THERMOPLASTIC.
    B. MATERIAL FOR UNFINISHED SPACES: SMOOTH, HIGH-IMPACT THERMOPLASTIC.
    C. MATERIAL FOR DAMP LOCATIONS: THERMOPLASTIC WITH SPRING-LOADED LIFT COVER, AND LISTED AND LABELED FOR USE IN "WET LOCATIONS."
    D. FINISH AS SELECTED BY ARCHITECT.

28. CONTRACTOR TO PROVIDE FURNISHED AS-BUILT DRAWINGS AND BUILDING OWNER'S MANUALS FOR ALL ELECTRIC POWER SYSTEM FOR RECORD.

29. INTERRUPTION OF EXISTING ELECTRIC SERVICE: NOTIFY THE BUILDING ENGINEERS OR OWNER AT LEAST 5 DAYS IN ADVANCE OF PROPOSED CUT-OFF ELECTRICAL SERVICE TO THE BUILDING.

ELECTRICAL NOTES

1. INSTALLATION OF ALL WIRING AND CONDUITS SHALL CONFORM WITH LATEST EDITION OF THE NATIONAL ELECTRICAL CODE INCLUDING NFPA 96 AND LOCAL CODES.

2. CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY, AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURAL CONDITIONS. EXPOSED CONDUITS SHALL BE INSTALLED PARALLEL TO THE BEAMS AND WALLS.

3. PROVIDE ALL REQUIRED PULL BOXES AND JUNCTION BOXES FOR INSTALLATION OF THE WIRING IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS THOUGH THE BOXES MAY NOT BE INDICATED ON THE DRAWINGS.

4. THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUITS ARE BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION SHALL BE COORDINATED PRIOR TO COMMENCEMENT OF WORK.

5. PROVIDE ALL NECESSARY COMPONENTS REQUIRED FOR MAKING FINAL CONNECTIONS OF ALL EQUIPMENT INSTALLED OR MODIFIED AS PART OF THIS CONTRACT.

6. DRAWINGS ARE DIAGRAMMATIC. ACTUAL LOCATION OF EQUIPMENT TO BE DETERMINED IN THE FIELD. NEW EQUIPMENT SHALL FIT INTO EXISTING AVAILABLE SPACE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE EQUIPMENT WHICH MEETS THE SPACE REQUIREMENT. RELOCATION OF EQUIPMENT TO FIT INTO EXISTING AVAILABLE SPACE SHALL BE ACCOMPLISHED AT NO ADDITIONAL COST TO THE OWNER.

7. ELECTRICAL REQUIREMENTS FOR MECHANICAL EQUIPMENT ARE BASED ON EQUIPMENT SPECIFIED. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL SHOP DRAWINGS PRIOR TO ORDERING AND INSTALLING EQUIPMENT.

8. WHERE ELECTRICAL INSTALLATIONS DEPEND UPON WORK OF OTHER TRADES, THE ELECTRICAL CONTRACTOR SHALL ENSURE THAT NECESSARY INSTRUCTIONS, TEMPLATES, MATERIALS, ETC. ARE PROVIDED AND SUPERVISE THE WORK OF THE OTHER TRADES FOR QUALITY AND CODE COMPLIANCE.

9. OPENINGS AND PASSAGE OF CONDUITS OR WIREWAYS THROUGH FLOOR SLABS AND FIRE RATED WALLS OR PARTITIONS SHALL BE PROVIDED WITH UL LISTED FIRE RATED SLEEVING SYSTEMS AS MANUFACTURED BY PROSET SYSTEMS INC., OR APPROVED EQUAL.

10. ALL JUNCTION AND PULL BOXES SHALL BE LABELED WITH THEIR VOLTAGE AND USAGE.

11. CUT AND PATCH SLABS, CEILING, ROOF, FLOOR, WALL, ETC. AND OTHER SURFACES AS NECESSARY TO ACCOMPLISH CONSTRUCTION WORK UNDER THIS CONTRACT.

12. APPROXIMATE LOCATIONS ARE SHOWN FOR ALL CONDUITS AND CONDUIT PENETRATIONS. CONTRACTOR SHALL VERIFY LOCATION FOR ALL CONDUITS AND CONDUIT PENETRATIONS. ADJUST LOCATIONS AS REQUIRED.

13. MINIMUM WIRE SIZE SHALL BE #12 UON. MINIMUM CONDUIT SIZE SHALL BE 3/4" UON.

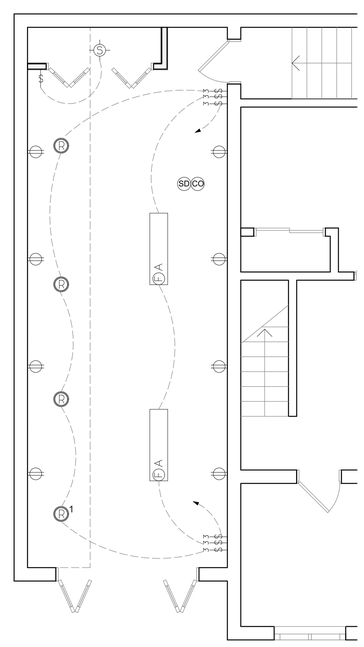
14. PROVIDE U.L APPROVED FIRE-STOPPING SYSTEM TO ALL RECESSED ELECTRICAL BOXES, PANEL, ETC. IN FIRE RATED WALLS AND CEILINGS.

15. PROVIDE U.L APPROVED FIRE-STOPPING SYSTEM TO ALL CONDUITS, CABLES, WIRING, SLEEVES, ETC. PENETRATION THROUGH FIRE RATED WALLS, CEILINGS AND FLOORS.

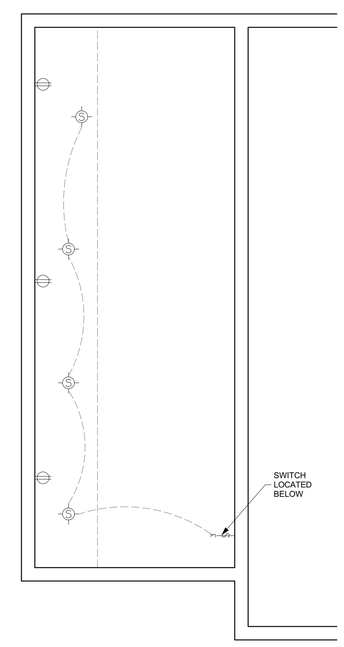
16. NOT LESS THAN 85% OF THE LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS OR NOT LESS THAN 85% OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN ONLY HIGH EFFICACY LAMPS. HIGH EFFICACY LAMPS ARE EITHER LED, COMPACT FLUORESCENT LAMPS (CFLs), T-8 OR SMALLER DIAMETER LINEAR FLUORESCENT LAMPS, OR LAMPS WITH A MIN EFFICACY OF
    1. 60 LUMENS PER WATT FOR LAMPS OVER 40 WATTS
    2. 50 LUMENS PER WATT FOR LAMPS OVER 15 WATTS TO 40 WATTS
    3. 40 LUMENS PER WATT FOR LAMPS 15 WATTS OR LESS

ELECTRICAL SCHEDULE

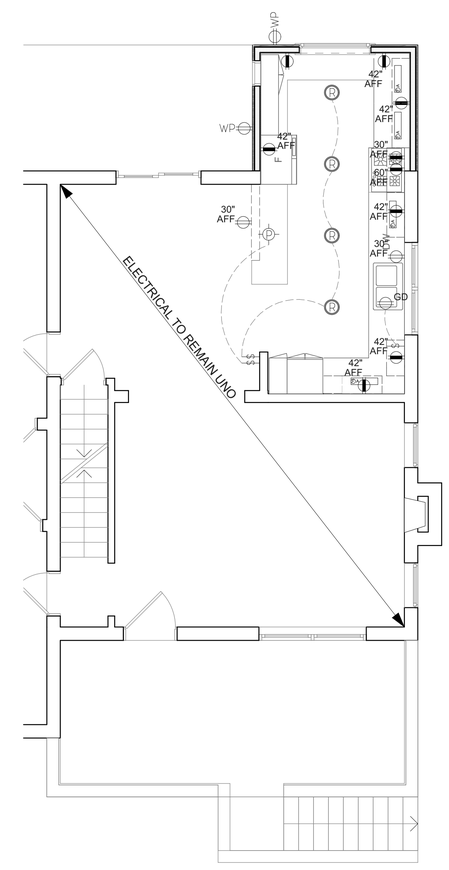
A	LED SUSPENSION LIGHT
A	UNDER CABINET FLOURESCENT LIGHT
S	SURFACE LIGHT
P	PENDANT LIGHT
R	RECESSED CAN LIGHT
	RECEPTACLE DUPLEX OUTLET
	INSTALL AFCI OUTLETS PER NEC CODE
	GFI RECEPTACLE DUPLEX OUTLET
WP	RECEPTACLE DUPLEX WATERPROOF
S	SWITCH
D	DIMMER SWITCH
3	3-WAY SWITCH
4	4-WAY SWITCH
SD	SMOKE DETECTOR-HARDWIRED, INTERCONNECTED, BATTERY BACKUP
CO	CARBON MONOXIDE ALARM
K	TELEPHONE
TV	CABLE TELEVISION RECEPTACLE



Partial Bsmt Elect Plan @ Garage Level | 1.
1/4" = 1'-0" | E1.1



Partial Bsmt Elect Plan @ Garage Loft | 2.
1/4" = 1'-0" | E1.1



Partial First Floor Electrical Plan | 3.
1/4" = 1'-0" | E1.1

BUNSON DESIGNS
CREATIVE IDEAS FOR YOUR LIVING SPACES
10739 Tucker St #260
Beltsville MD 20705
301.579.4563

The Diamond Residence
12 VALLEY VIEW AVE
TAKOMA PARK MD 20912

Partial Bsmt Elect Plan @ Garage Level, Partial Bsmt Elect Plan @ Garage Loft , Partial First Floor Electrical Plan

Written dimensions on these drawings shall have precedence over scale dimensions. Contractor shall verify and be responsible for all dimensions and conditions on the job and this office must be notified of any variations from the dimensions and conditions.

Drawn by	Date
LB	12.06.21
Checked by	Date
.	

E1.1

THE COLLECTION

BI-FOLDS | SLIDING DOORS | WINDOWS | GLASS ROOFS | BESPOKE PROJECTS

express bi-folding doors

CONTENTS

INTRODUCTION

SHOWROOMS

RECOGNITION

BI-FOLDING DOORS

SLIDING DOORS

WINDOWS AND ROOFS

FRONT DOORS

WELCOME TO THE EXPRESS DIFFERENCE

Imagine your ideal home. A space for family, entertaining and unwinding. We've spent more than a decade helping people create their dream homes and we know nothing short of perfect will do.

In 2007, we set out to build a company that made a range of high quality bi-folding door designs with the power to transform people's homes forever. Since then we've grown to become the UK's largest specialist manufacturer and installer of premium folding and sliding doors, windows and roofing products.

We couldn't have achieved all this without also taking pride in delivering outstanding service, reliable delivery and a comprehensive and innovative range of quality aluminium products. Today, we employ over 280 people and our products are creating spaces to live, grow and unwind in, right across the UK.

STYLE BACKED BY PERFORMANCE AND ASSURANCE

From the moment you make your first enquiry, to the initial on-site visit and survey, right through to design, manufacture and installation, we work with minimal disruption to you. Plus, because we design, manufacture and install everything ourselves, you can be sure of the highest level of craftsmanship in all our products.

Offering an end-to-end service like this means we take complete responsibility for all aspects of our work. We have the excellent products, the expertise, infrastructure and the resource to offer unrivalled service and after care. In addition, everything comes with a comprehensive 10-year guarantee and all the correct building regulation compliance documentation.

By coming directly to us, the manufacturer, you'll also get the best possible price and advice. We specialise in home renovation projects, whether it's a single product or a large, bespoke Grand Designs style new build. We can also supply products Nationwide on a supply-only basis, as well as offer a dedicated trade and commercial service to construction professionals.

express bi-folding doors

express for trade

SUPPLY ONLY – ONLINE ORDERING AVAILABLE

We pride ourselves on our bespoke offering and turn-key service but we do offer a small selection of our industry leading products in set sizes available to purchase online through our sister Company Express Bi-folds Direct.

Express Bi-folds Direct allows the opportunity to purchase some of the best bi-folding, sliding doors and rooflights available in the UK online at your convenience.

Transform your home with stunning doors and roofing systems expertly manufactured by Express Bi-folding Doors and delivered directly to you.

expressbifoldsdirect.co.uk

express bi-folds DIRECT

A BUSINESS YOU CAN TRUST

We are a family-owned business, which began back in 2007 with a team of three people who began manufacturing and installing aluminium bi-folding doors, sliding patio doors and windows. Today, we have a world-class manufacturing facility, the best machinery and most skilled workforce in the industry.

Supreme quality is our starting point. That's why we manufacture all of our products at our state-of-the-art, 180,000 sq ft manufacturing site in Leeds. It's also why we take care of everything for you, from inception to completion, including guarantees and after care. It's an approach that has caught the attention of many of the UK's leading architects and developers, with whom we've worked on a range of TV shows – including Channel 4's Grand Designs.

It's our commitment to quality and innovation that means we are now firmly established as the largest specialist manufacturer and installer of bespoke aluminium folding and sliding doors, windows and roofing products in the UK.

A renovated home transformed with our products throughout

A modern extension and renovation on the back of this 1970's property

EXPRESS YOURSELF

We're originally known for our high quality bi-folding doors, but over the years we've expanded our expertise to include many aluminium glazing products. Now we manufacture a wide range of products to complement your home and lifestyle. From windows and front doors to sliding doors, sky lanterns and curtain walling – all our products are made with state-of-the-art technology and unrivalled craftsmanship. Manufacturing our own products means we can combine our products and create bespoke solutions to create truly unique spaces in your home. Our attention to detail and years of experience allow us to create stunning spaces from survey and installation to years of unmatched after care.

MADE IN GREAT BRITAIN

A stunning, open-plan new-build home, completed back in 2010

Huge, shaped windows are the dominant feature within this new living space

A restored farm house updated by our bespoke glazed products

An old RAF dwelling completely renovated, extended and modernised

FIND YOUR COLOUR

Our products are a great way to bring your personal style into your home and can be coloured to show off your taste. With hundreds of colours to choose from, you can match your aluminium doors and windows to your worktops, furniture or anything you like. Pick from over 200 RAL colours, or a vast array of finishes including the unique textured and metallic finishes within our exclusive Essence and Elite colour range.

And because our products are powder-coated, durability is never an issue. The colour is baked-on, providing a lasting finish that won't peel off or lose its shade – and is guaranteed for 10 years. For more details on our colour options, please contact our sales team or visit our website to find your perfect choice.

Huge choice of 200 RAL colours

View our colour ranges in one of our showrooms

UNI-BLINDS

Integral blinds are the ideal solution for bi-folding doors. Large amounts of glass need screening for privacy and to control light and solar gain. Uni-blinds are the ideal solution because they are contained within the glass itself, they can be concealed discretely when not in use, and simply folded away with the doors when they are opened. Plus, they never need cleaning.

SEEING IS BELIEVING

There's no better way to experience how our doors, windows and roofing systems could completely transform your property than by visiting one of our beautiful showrooms. We have stunning showrooms in the South East, as well as our flagship showroom in Leeds. Our Glasgow showroom is also the most extensive of its kind in Scotland. A visit is also the perfect opportunity to talk to our friendly staff who can provide helpful tips and advice.

As well as in our showrooms, you can find our products being shown at various exhibitions all over the UK. We attend annual events in Birmingham, London, Farnborough, Surrey, Harrogate, Glasgow and Edinburgh.

Homebuilding & Renovating SHOW

GRAND DESIGNS LIVE

ideal HOME SHOW

All showrooms are open six days week. For showroom addresses and opening times, visit expressbifolds.co.uk

Redhill Showroom

Glasgow Showroom

Romford Showroom

Leeds Showroom

Leeds Showroom

Leeds Showroom

THE HOME SPACE FROM EXPRESS

Our flagship showroom in Leeds is the largest and most unique of its kind in the UK. It really must be seen to be believed. Several full-sized show homes sit inside the showroom where all our products can be explored, within real life settings to help visitors see how our products will look and work in their home.

As well as being able to explore our full range of products from front entrance doors through to complex curtain walling visitors also have the unique opportunity to see where all our products are expertly made. Part of our manufacturing operation is visible from the showroom, and we are also happy to take visitors across to our viewing mezzanine where bespoke British manufacturing can be seen in all its glory.

Open seven days a week, it's the ideal place to get a hands on feel for our vast range of products, gain inspiration and talk to our friendly staff about your exciting plans for your home.

For showroom addresses and opening times, visit expressbifolds.co.uk

FAMOUS FANS

We're not the only ones who think our products are among the best on the market. Over the years, we've been endorsed by numerous celebrities and appeared on plenty of home renovation shows like ITV's Love your Home and Garden, BBC's DIY SOS and Channel 4's Grand Designs.

Under the watchful eye of TV's favourite architect George Clarke – a keen admirer of Express – we've appeared on Old House to New Home, The Home Show, The Restoration Man, Ugly House to Lovely House and Amazing Spaces. Back in 2013 George even helped open our Redhill Showroom and offered advice and insights to visiting customers.

Presented by Dominic Littlewood and Melinda Messenger, Cowboy Builders is a television programme where poor-quality workmanship is put right by quality, honourable companies. That is where we were involved. We have featured on the programme four times and even had the pleasure of Melinda Messenger visiting our Leeds Showroom to ask for our assistance.

As a direct result of our successful involvement in the programme, Dominic Littlewood decided to utilise our products for his own projects and, like George Clarke, also lent his services for our Redhill Showroom open day. Dominic also helped open our Leeds Showroom opening in 2016.

In 2013 we completed installations for projects that were featured on Sarah Beeny's Double Your House for Half the Money. Since then, we have completed several more projects for the television programme, leading Sarah Beeny to visit our Redhill Showroom with the homeowners from one of the projects.

"YOUR FAB DOORS FEATURE HEAVILY IN THE SERIES – DEFINITELY A VERY POPULAR CHOICE WITH CONTRIBUTORS"

TWEET BY SARAH BEENY

George Clarke

Phil Spencer

Dominic Littlewood

John Amabile

Linda Barker opens our Romford Showroom

George Clarkes Ugly House to Lovely House featuring a huge glazed atrium and lift and slide patio door

Sarah Beeny's Double Your House for Half the Money

Crittall style doors featured on Channel 4 in June 2019

George Clarkes Old House, New Home

Grand Designs 2019 – North Witch Point

Grand Designs 2019 – North Witch Point

Grand Designs 2018 – The Corn Mill

Grand Designs 2018 – The Corn Mill

Grand Designs 2010 – The Lakehouse

GRAND DESIGNS

We love carrying out projects on any scale, whether it be replacing existing windows and doors with our own, simple installations into a new extension or home renovation, and we also love helping our clients bring their own Grand Designs to life. Our showrooms are the perfect settings to inspire ideas on what products will work best in each space and we offer such a large range of bespoke products that we can find solutions for any project regardless of their size and complexity.

We've been transforming homes all over the UK since 2007, including some incredibly ambitious self-build projects that have seen our work featured on Channel Four's Grand Designs, including a unique project in the Lake District that was featured back in 2010.

Award-winning project The Corn Mill in Sheffield was featured in on the show in 2018. The installation itself was also featured, which took place during the worst spell of weather for years. Most recently, this unique new-build, nestled within the cliffs of Portpatrick, demonstrates how our products can complement and sit within the most elaborate designs.


CASEMENT WINDOWS
XP GLIDE
XP GLIDE
CASEMENT WINDOWS
FIXED PICTURE WINDOW
XP VIEW
TILT AND TURN WINDOW

ELEGANT BI-FOLDS

Bi-folding doors fill rooms with light, and their sweeping design creates a seamless transition between inside and outside. These doors allow small and huge spaces to be swept open in style.

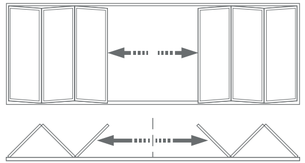
We offer three bi-folding doors – the **XP View**, the **XP10** and the **XP Vision**. Each door has its own unique features, as we know all homes are different.

The **XP10** is our most cost-effective bi-fold. Expertly engineered and manufactured, it's ideal for residential homes and projects where smaller folding door panels are required.

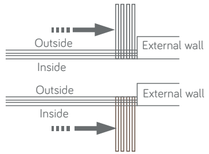
The **XP View** can be manufactured with much larger folding panels compared to the **XP10**. Years of research, development and modification have created this wonderful system with heavy-duty runners giving the door unmatched stability. The manufacturing process involves injecting panels with a liquid component which sets rock hard, making each panel light yet solid as concrete.

Not only is the **XP Vision** the slimmest bi-folding door in our range, it's the most thermally efficient and can offer the largest individual panels available on the market. It's strong and secure while offering unparalleled views from the uninterrupted glazing.

Express doors fold to give a large opening aperture.



Choose to fold Express doors internally or externally from the opening aperture.



PRICING YOUR DOORS

An approximate size is all we need to start outlining the price of your project. Once we have that information we can start talking about your requirements, like maximum glass space, a normal opening door, or a south-facing project.

You can call us or email sales@expressbifolds.co.uk with any questions.

We offer a range of options, and they all have one thing in common. Our bi-folding doors bear no weight loading on the support above. All our folding doors run on stainless-steel wheels with high precision bearings, which give an effortless gliding operation and extreme durability. As there is no weight at the head of the door, the bifold will not cause your RSJ to bow or deflect. So, its weight doesn't need to be considered when calculating steel requirements.

Threshold options include a rebated threshold, which we always recommended because of its excellent weather performance, and the flush threshold with its continuous floor level for the ultimate in aesthetic appeal. Although the flush threshold option provides the perfect solution for wheelchair access, we do always recommend the rebated threshold, and our surveying expertise will ensure that either option, results in a continuous floor level with a minimal upstand.

YOUR CHOICE OF BI-FOLDING DOOR

XP VIEW

XP VIEW – OUR PREMIER BI-FOLDING DOOR

The **XP View** is a premium quality bi-folding door system. We have been manufacturing this door for years, and in 2017 modified the profile to make it perform even better. The engineering excellence of the door means that although the face widths are narrow, with a typical sight line of just 120mm, the frames are incredibly strong, which ensures that each individual bi-fold door panel can go up to an industry leading 1200mm wide as well as up to 3000mm high.

The fundamental design of the **XP View** ticks all the boxes for both retail and commercial markets, creating a bi-folding door with thinner frames and more glass. The door leaves fold and stack easily left or right, inward or outward – gliding effortlessly, and almost silently, on high quality roller carriers. The thermal properties of the door comfortably surpass all current and future building regulations, and security is not an issue thanks to its multi-point locks throughout, as well as all of the door's gearing being completely concealed within the door.

The system also boasts a patented design of adjustable rebates in the side jambs of the outer frame. This design means that the system is fully adjustable, which guarantees its weathering and operational performance for years.

Our industry-leading bi-folding door, the **XP View** has slender sight lines and large individual panels, and because we always carry over £1 million worth of stock we can manufacture and install a bespoke **XP View** bi-folding door within a matter of weeks. This fantastic folding door looks superb both internally and externally and adds a wow factor by creating a large clear opening that draws light into your home.

XP10 - BIG STYLE, SMALLER PRICE TAG

The XP10 bi-folding door is ideally suited to residential applications and boasts many of the same qualities as the **XP View** – but is a much more cost-effective solution. It has the same multi-point locking, flat intermediate handles and a clean and modern aesthetic. However, individual panels within the **XP10** cannot be manufactured quite as wide or as tall as our **XP View** door system.

The **XP10** is a superb bi-folding door and is extremely attractive, with a sight line of just 132mm plus a rebated and flush threshold option, creating a seamless finish from inside to out. The system operates effortlessly on four stainless steel bogey wheel assemblies, which run on a dual stainless steel track.

The **XP10** offers superb value for money for bi-folding doors up to 6.5 metres wide. As the **XP10** is our most cost-effective bi-folding door, we highly endorse the product for the replacement of existing doors and windows, such as French doors and sidelights.

We always recommend our in-house installation service and we are also happy to provide this product on a supply-only basis – either to be installed by you, or to trade clients who are supplying and installing the door for their own customers.

XP10

XP VISION

XP VISION – RAISING THE BAR

Launched in 2019 this exciting new product is the highest specification bi-fold door available.

Combining strength, security and durability with the slimmest sight-lines on the market, these panoramic bi-folding doors are both stunning and practical. The **XP Vision** can replicate the large glass panels of our sliding patio doors, but with the flexibility to open the entire space for a seamless transition from inside to out.

This world class, highly insulated folding door has been designed with a huge maximum panel width of 1500mm and a typical sight-line of just 105mm meaning it is a truly ground-breaking product that is perfectly suited to luxury new-builds, extensions and replacement installations. Available to view in all our showrooms we'd love you to see the product first hand so you can share in our vision.

BI-FOLDING DOORS PRODUCT FEATURES

XP VIEW

- Typical sight line of just 120mm
- Suitable for large expanses in excess of 10 metres
- Maximum panel width of 1200mm
- Maximum panel height of 3000mm
- Size of overall maximum panel up to 3m²
- Adjustable rebates within the side jambs
- 90 degree moving corner post solution available on odd-odd panel configurations and 15mm low threshold
- Surpasses all requirements of document L 2016 and Part Q 2015
- Typical U-value 1.5 W/m²k with 1.0 W/m²k glazing Additional high insulation options available to lower U-value further
- Rebated bottom track tested up to 600Pa water tightness
- Low threshold has a 15mm upstand above FFL and a deep drainage trough to provide a weather performance suitable for most ground floor locations Tested to 300Pa watertight level
- Secure by Design accredited product

XP10

- Typical sight line of just 132mm
- Ideal for residential applications
- Contemporary squared profiles as standard
- Max panel width of 1100mm
- Maximum panel height of 2400mm
- Size of overall maximum panel up to 2.4m²
- Surpasses all requirements of document L 2016
- Tested to stringent PAS 024: 2016 testing standards
- U-value 1.5 W/m²k based on using a sealed unit with 1.0W/m²K pane
- Air Class 4, 600Pa
- Water Class E, 750Pa
- Wind Class 4, 1800Pa

XP VISION

- Typical sight line of just 105mm
- Suitable for large expanses well in excess of 10 metres
- Maximum panel height of 3300mm
- Maximum panel width of 1500mm
- Largest panel widths available in the market place of 1.5 metres, meaning the following configurations can be achieved: 4.5 metres with 3 panels, 6m with 4 panels and 7.5m with 5 panels. These huge panel widths will look like sliding doors but with the flexibility of being able to open the entire space
- Adjustable rebates within the side jambs
- PAS 24 hinges and internal pull handles
- Profiles filled with energy bar and PE insulation foam for enhanced thermal performance
- Significant energy and cost saving due to the excellent thermal insulation and U-values (as low as 1.0 W/mK)
- Quadruple locking catches on intermediate panels for enhanced security
- PAS24 tested
- Moving corner post available with odd-odd panel configurations

XP VIEW


XP10


XP VISION

CASE STUDY – FENAY BRIDGE

CREATE YOUR DREAM HOME

These homeowners purchased a plot of land to build their new dream home. We provided our expertise throughout the buying process and our surveyor on site worked with the skilled contractors to ensure the build, our products and ultimately the house was finished to its maximum potential.

The open-plan kitchen dining area and living room both benefit from a large set of our **XP View** bi-folding doors, the slim sightlines allow for maximum light and views out to the garden, and both can be effortlessly open allowing for a seamless transition from inside to out. The five panel bifold in the kitchen contains an everyday access door acting as the back door for a quick exit out to the garden.

When the weather allows the full set can be opened, instantly connecting the kitchen with the newly build BBQ area outside.

This stunning new-build property that has been nominated for a local design award. A combination of traditional Yorkshire stone coupled with our bespoke aluminium products in RAL 7016 anthracite grey alongside bold cladding and fascia's has created a distinctive and contemporary home. Internally our glazing is the dominant feature, a house finished to the highest standard where each room contains huge windows and doors ensuring expansive views, and optimum light and space, is achieved in every room in the house.

CASE STUDY – KINGSGATE HOUSE

BEAUTIFULLY CLASSIC, TOTALLY CONTEMPORARY

This West London property has been both modernized and extended, courtesy of this contemporary single storey extension. This spacious rear extension includes a new kitchen diner, snug, and a striking raised patio area with an external BBQ and seating area, linking the new outdoor area to the new open-plan kitchen space.

The full width of the new space is made up of two large **XP View** bi-folding doors, each spanning a width of 5.3 metres and standing at 2.6 metres tall. A large three-panel folding door makes up the return of the extension folding away from the corner that meets the rear elevation bi-folding doors. The structural posts within the extension have all been cloaked in insulated pressings, ensuring the dusty grey RAL colour of 7037 runs consistently throughout the entire wall of panoramic glazing.

Utilising bi-folding doors on both sides of the extension means the side elevation can be opened out to the new BBQ area, with the option of opening the full rear elevation, creating a stunning open space, seamlessly flowing from the kitchen out to the garden.

The flat roof also contains two of our skyline roof lanterns expertly positioned over the dining table and new breakfast bar, creating light filled, luxurious surroundings to enjoy meals, and socialising with friends and family.

The minimalist design of our skyline roof lanterns is very much in keeping with this beautiful extension that has been completed with both a quality design-led approach, and the finest attention to detail.

CASE STUDY – HILL ROAD

ANOTHER ENLIGHTENING STOREY

Our work alongside Laughton-based Clear Architects realised the task of transforming this 1950s Essex bungalow into a modern three-storey home. We brought this design-led project to life with various products, including **XP View** bi-folding doors.

At 3.3 metres, this typically standard-sized bi-fold demonstrated the architectural elegance of our bi-fold range. A door which would fit seamlessly into almost any home was key to this property transformation, and an essential feature of the new open-plan kitchen design.

To complement the bi-fold, we finished the project with sliding doors, and a mixture of windows and aluminium curtain walling over two floors. The result bathes the downstairs kitchen, dining area and upstairs landing in light.

STYLISH LEISURE

As impressive outside the house as they are within it – bi-folding doors are an ideal way to create the perfect space both outside and in. They are just as striking when used in the garden, proving popular for use around swimming pools, bars, home gyms, BBQ areas and garden offices.

If you're thinking about creating a leisure space for your home, why not visit one of our unique showrooms for inspiration?

Locations and opening times can be found on expressbifolds.co.uk

"I'M SO HAPPY WITH MY BI-FOLDING DOORS FROM EXPRESS. THEY ARE PERFECT AND EXACTLY WHAT I WANTED."

MARK WRIGHT


CASEMENT WINDOWS
CURTAIN WALLING
CURTAIN WALLING
SKY-LINE ROOF LANTERN
XP VIEW
XP GLIDE S
XP GLIDE S

CHOOSE YOUR SLIDING DOOR

LESS FRAME MORE GLASS

The capabilities of our industry leading sliding door systems create more of a moving glass wall than a door. We offer various sliding door systems for a range of projects and budgets, and constantly evolve our product offering to ensure we remain on-trend & ahead of the market as demand grows for expansive glass doors, ease of operation and minimal sightlines.

We offer two slender sliding doors, our In-line sliding door is the XP Glide with a sight line of just 35mm and our slimmest solution the structurally bonded XP Slide Panoramic + with a sightline of just 25mm. Lift and slide patio doors are a great option also, the 'lift-and-slide' system means that as the handle is turned, the door is lifted on to ball bearings, making sliding the door easy. At the turn of a handle, the door can be secured in an open position ideal for allowing ventilation, or when children are playing in and around the doors.

All our doors are made with aluminium, making them lightweight, durable, and practically maintenance-free. They can be powder coated in the colour of your choice to complement your home décor, and each system boasts its own unique features and benefits allowing you to choose the right product for your specific requirements.

XP GLIDE

The **XP Glide** is designed to house a double-glazed unit weighing up to 150kg and is ideal for home renovations and new builds and extensions, the tried and tested system is also suitable for heavy duty commercial applications. Boasting a feature steel handle, a sightline of 35mm, the **XP Glide** is our most popular sliding door because of its great looks and the fact it has no strict size limitations.

XP GLIDE S

The **XP Glide S** is a heavy-duty lift and slide system with each panel capable of housing a glazed unit weighing 300kg. The system is ideal for large spans and commercial use and with a 40mm sightline available on a twin track solution means we can offer both the performance of a heavy-duty lift and slide door with the superb aesthetic of a slender sliding door.

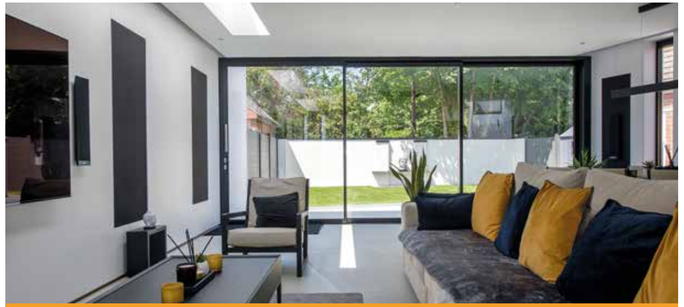
XP INFINITE

The **XP Infinite** is a premium quality lift and slide system. It has a more-slender outer frame than the **XP Glide S** and can be a more cost-effective solution. The system boasts exceptional thermal and weather performance, a 47mm sightline on twin track systems and as the option of a moving corner post solution.

XP SLIDE PANORAMIC+

The **XP Slide Panoramic+** sliding patio door offers a contemporary design statement for the most discerning homeowner. Absolutely minimal frame and maximum glass mean we can offer a beautiful glass sliding door that we believe is finest panoramic sliding door available in the UK. The **XP Slide Panoramic+** offers a vertical sightline of just 25mm and the outer frame of the door is designed to be completely concealed by the internal and external wall, giving the appearance of uninterrupted glass for an effortlessly sleek finish.

In addition to the above we offer several more sliding door systems, which can be discussed with our sales team. All our systems are manufactured bespoke in our Head Office in Leeds and are available with a variety of panels. A traditional twin track system offers the option of two or four panels and a triple track system typically contains three or six panels.



XP GLIDE

XP GLIDE S

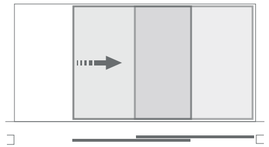
XP SLIDE PANORAMIC+

SLIDING OR BI-FOLDING?

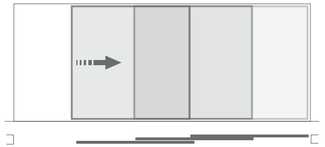
Our industry-leading range of bi-folding and sliding doors will all transform your space, flood your home with light and allow for expansive views of the outside landscape. All our products benefit from a comprehensive 10-year guarantee when installed by ourselves.

How you will use your doors, and how they will look in your home, are the main considerations when choosing between a bi-folding door and a sliding door. Sliding doors boast less visible frames than bi-folds and are considered to look better when closed. Sliding doors also create more of a dramatic feature within any space thanks to huge glass panels and flexible opening configurations.

PICK YOUR TRACK



Twin track allows up to 50% maximum opening.



Triple track allows up to 66% maximum opening.

Quadruple track allows up to 75% maximum opening.

TWIN TRACK

Our two panel and four panel sliding doors offer a 50% clear opening. And thanks to the quality and strength of our sliding door systems, we can manufacture a door in excess of 5000mm x 2400mm split into just two sections, and the doors themselves can be manufactured more than 2800mm tall.

TRIPLE TRACK

Our triple track door system offers numerous flexible configurations:

- Three panels can create a two-thirds opening, or a middle sliding panel with two fixed.
- For extremely large doors, six panels with three stacking either side offers both symmetry and a huge opening, creating an impressive sliding door which will transform your property.
- The massive 150kg weight limit per panel ensures that our **XP Glide** doors can be manufactured in excess of 6500mm x 2400mm and split into just three sliding panels, making glass walls that create vast openings.
- Our lift and slide doors, the **XP Glide S** and **XP Infinite**, can go even bigger, ideal for grand scale projects and doors at almost three metres high. The panels can glide open at the lightest touch and be locked into any position to create a bespoke arrangement.

QUADRUPLE TRACK

Our **XP Infinite** patio door is available with a unique quadruple track that houses four sliding panels that can all stack to one side to create a 75% clear opening. This unique option is the perfect solution for large spans in excess of eight metres and means the glass door can dominate a space, whilst retaining the option of creating a huge clear opening.

XP GLIDE - IN-LINE SLIDING DOORS

Flexible configurations, larger glass areas, rapid delivery and installation times – say hello to the **XP Glide**. The **XP Glide** is our best-selling and most popular patio door. Minimum aluminium profiles between panes means unrestricted views and more natural light. The **XP Glide** is an extremely strong door and is suitable for replacing existing products as well as new builds and extensions.
It is also available with a bold feature handle.

PRODUCT FEATURES

Benefits of the **XP Glide** door include:

- Maximum weight limit per panel of 150kg
- Maximum height 2550mm
- SKG security tested
- Twin, triple track and wider configurations available
- Typical sight line of just 35mm
- Overall U-value of 1.6W/m²k
- Air Class 3, 600Pa – equivalent to 70mph winds
- Wind Class AE, 2400Pa – equivalent to 142mph winds
- Water Class 7a, 300Pa – equivalent to 50mph winds and water being pulsed at the frames under pressure
- Stainless steel feature handle available

XP SLIDE PANORAMIC+ - STRUCTURALLY BONDED SLIDING DOORS

The **XP Slide Panoramic+** offers a modern design for the most discerning homeowner. The minimal frame, which is designed to be concealed within the building, gives the appearance of uninterrupted glass for an effortlessly sleek finish. The sash profiles are concealed by the doors outer frame and the glass that is bonded to the frame, giving the door a vertical sight line of only 25mm. This exclusive product is expertly manufactured and only available when installed by our expert teams. We have also designed a lockable cylinder into the contemporary interior handle, meaning we can offer a five-point lock made up of twin shoot-bolt locking, and three latches and keeps, creating an extremely secure, bonded panoramic sliding door that meets UK building regulations without the requirement for an electronically or magnetically operated lock.

PRODUCT FEATURES

Benefits of the **XP Slide Panoramic+** include:

- U-value as low as 1.1W/m²K
- Testing Air Tightness: Class 4
- Water Resistance: Class 9A
- Wind Resistance: Class C
- Stainless steel, high-performance sliding carriage runners
- 25mm cross section sight line
- Fully concealed profiles
- Five-point locking
- Various vertical reinforced profiles dependent on wind loading requirements
- Moving corner post available

LIFT AND SLIDE DOORS

Secured by Design

Police Preferred Specification

XP GLIDE S

The **XP Glide S** is a premium specification lift and slide door that has been newly modified for 2018. The lift and slide system is highly robust, with excellent thermal efficiency that can achieve overall U-values as low as 1.4 W/m²K. The system enables you to lock the door in any position. As the door lifts onto the ball bearings, the quality of the system minimises the weight, meaning that a double glazed unit weighing up to 300kg can be easily slid to one side.

The system has superb weather and thermal performance and has been slimmed down, including a slender 40mm sight line section available on twin track systems, creating a panoramic door with the additional benefits of lift and slide performance and operation.

PRODUCT FEATURES

Benefits of the **XP Glide S** include:

- 102mm typical sight line which can house a double-glazed unit weighing up to 300kg
- Fully weather tested slimline interlock with 40mm sight line available on twin track systems
- Lockable in any open position
- The elevating sliding gearing makes operation easy
- Secured by Design accredited product
- Overall U-values at low as 1.4W/m²k
- Wind load resistance in accordance with DIN EN 12210 – up to class C1/B2
- Watertightness in accordance with DIN EN 12208 – up to class 9A
- Air permeability in accordance with DIN EN 12207 – up to class 4
- Maximum height of 3 metres

Secured by Design

Police Preferred Specification

XP INFINITE

The **XP Infinite** is our brand-new lift and slide system that represents the new generation of our high-end, lift and slide patio door systems.

It is an excellent solution for projects with demanding requirements, meeting the trend of "transparent" architecture through extensive glass surfaces, with high thermal insulation, safety and modern design. Its minimal design and its various innovative characteristics include the option of a moving corner post and a unique quadruple outer frame and bottom track that allow the doors to create a 75% clear opening.

The **XP Infinite** is the ideal product for projects requiring wide spans for enhanced daylight, outstanding performance and maximum ease of use.

PRODUCT FEATURES

Benefits of the **XP Infinite** include:

- Burglar Resistance RC2 and PAS 24
- Overall U-values as low as 1.1 W/m²k
- Lift and slide mechanism makes the door easy to operate and can be locked in any open position
- Minimal sight line of just 47mm available on twin track doors
- Typical sight line of just 105mm on three, four and six-panel sliding doors
- Innovative 24mm low threshold option with built-in drainage for none exposed locations
- Typical sight line of just 94mm and more slender profiles available with the low threshold option
- Twin, triple and unique quadruple bottom tracks available
- Moving corner post available
- All panels moving available with the low threshold bottom track (none exposed locations only)

CASE STUDY – HILL CREST

SPECTACULAR SETTINGS

The owners of this home wanted to renovate the existing stone-built property and more than double its footprint with a huge rear extension. The brief of the project was to update the existing building and retain its townhouse characteristics whilst adding a grand designs style extension that could easily be mistaken for a modern new build home. The front of the house benefits from our slim aluminium windows installed into the existing stone mullions. The windows achieve the 'crittall style' appearance thanks to the black Georgian bars inside the glass.

The double height rear extension is dominated top to bottom with our impressive glass products. Several XP Slide Panoramic doors span the whole width of the rear extension separated only by the structural steel junctures of the extension. The double height atrium is screened with Schueco FWS 35 PD curtain walling. This unique façade glazing was the perfect solution for this project thanks to its slender sightlines of just 35mm allowing it to line through with the panoramic doors below.

The finished results of this project are stunning and one of the most impressive extensions you are ever likely to see. The brief has been wonderfully achieved, stepping through into the open-plan extension is nothing short of spectacular, floor to ceiling glass, slim sightlines, panoramic views it's an immediate wow factor from all angles and a great example of how visiting our showrooms can provide the working template as you work towards your own dream home.

CASE STUDY – OAKDALE MANOR

SPACE TO LIVE

This traditional home has been fully transformed into a stunning space using a range of our products. It boasts coordinating finishes to all of the windows and doors, including the entrance atrium, gable extension with bi-folding doors, and various sets of our **XP Glide** sliding doors with a sight line of just 35mm.

The open-plan kitchen and dining area benefits from a wall of glass that takes full advantage of the beautiful outside surroundings. This is gracefully achieved through two twin track sliding doors and a three panel sliding door within the new extension – a wonderful example of why sliding doors are a popular choice for new home build projects.

CASE STUDY – THE CEDARS

MODERN LIVING

The combination of the superb taste of the homeowners and our expertise in manufacturing and installing has created a stunning setting. The modern minimalist kitchen is complemented by the striking triple track sliding door, which creates three picture windows looking out onto the landscaped garden and patio area.

The **XP Glide** bottom track has been measured perfectly flush with the internal floor level and with no step to the external flags outside. A great example of seamless transition that can be created with our industry-leading sliding doors.

WANT TO SEE MORE?

Watch the video of The Cedars project on our website at expressbifolds.co.uk

CASE STUDY – GLEDHOW LANE

THINK OUTSIDE THE BOX

The homeowners wanted to construct a beautiful modern structure within the confines of their existing property boundary. Fundamental to the design would be the clever use of cladding materials to both conceal the structure and to seamlessly blend into the surrounding mature woodland. Internally our products would play a key role also with large areas of glazing designed to connect the interior with the woodland views outside.

Arguably the most impressive feature of the project is the three-sided corner to corner glazed curtain wall pod that sits atop the structure. A glass box positioned on cantilevered steels acting very much as a modern-day tree house.

The living area benefits from our panoramic sliding doors which act as a glass wall that floods the space with light and offers floor to ceiling views, whilst allowing easy access to the balcony outside.

Horizon fixed windows in the narrower openings and tilt turn windows where the clients wanted to allow fresh air into the property. The main entrance door is our premium Bentano model. Its robust appearance and minimalist design characteristics blend seamlessly with the structure and the discrete indented handle is very much in keeping with the property's contemporary appearance.

PICTURE PERFECT WINDOWS

Thinking about transforming your home with our modern and stylish sliding and bi-folding doors? Complete the look with windows to match. We have products for traditional and contemporary homes, plus additional options for commercial projects. And, as you'd expect, they're all built to the same high quality and specifications we're known for.

We have a great range on offer, from fixed to tilt and turn and bay windows – all available in a huge choice of over 200 RAL colours as well as various finishes including dual colours as well as our Essence and Elite options. Plus, we also design and manufacture bespoke shaped windows, apexes and gables – just speak to us if you need anything unusual and we'll find a solution.

For more information visit our website expressbifolds.co.uk or visit one of our showrooms.

Casement windows

Tilt and turn windows

Shaped frames and gables

Fixed windows

Bay windows

Curtain walling

CASEMENT WINDOWS

Casement (open out) windows are our most popular design. A flat sash casement window features a square outer frame with opening sashes that sit completely flush against the outer frame, creating a modern appearance. Our Scenic & S70 casement windows feature slender profiles, superb thermal performance & Secured by Design accreditation making them perfect for new builds, extensions and replacing existing windows.

FIXED WINDOWS

Fixed windows are a cost-effective way to allow maximum light with minimum outlay. These windows are designed to complement our product range and can be manufactured to the smallest sizes, allowing light into a restricted space. They can also be manufactured without transoms or mid-rails, up to five square metres in size, creating an impressive glass façade with stunning visual impact.

TILT AND TURN WINDOWS

Tilt and turn windows combine the benefits of both fixed windows and casement windows. With generally much larger individual sashes than our casement windows, they allow maximum light and offer great views. Large panes of glass can be tilted inwards to allow ventilation into a room, or the full sash can be swung inwards to open the window fully – great as a fire escape window if needed.

BAY WINDOWS

Whether you're replacing existing bay windows or creating new ones, our entire window range can be utilised in any configuration you like – creating a really modern solution to a traditional bay window.

SHAPED FRAMES AND GABLES

Our experienced craftsmen can manufacture and install any shape of frame to fit any opening. We also manufacture and install bespoke powder-coated pressings and fascias to cloak off all steel and timber supports to give a highly-detailed architectural finish. Manufacturing various products allows us to offer individual solutions to suit your unique requirements, combining our door systems with glass façades, windows, shaped frames and roofing systems. We are unique in that we have no need to outsource products or workmanship, taking full responsibility for all aspects of the project, including manufacture and installation.

CURTAIN WALLING

If you're looking for something with real wow-factor, this could be the answer. Curtain walling is a structural aluminium frame, which can house high specification glazing, insulated panels and a full range of our products including doors and windows, creating a stunning addition to your home. This style can be used to create large elevations of glass, making it increasingly popular in luxury residential developments.

BLUE SKY THINKING

Let your imagination soar by combining your aluminium doors and windows with a bespoke glass roof – all designed, engineered and manufactured in our world class production facility and installed by our experienced craftsmen. What better way to extend your home and create a stunning space at the same time? All our roofs are highly engineered in reinforced aluminium and are powder coated to match the colour of the door and window products, creating the same stylish look across the whole installation.

We manufacture a range of top-quality roofing products suitable for all types of properties. Using industry-leading techniques and the highest quality materials, our bespoke aluminium roofing solutions are strong and secure, and allow the maximum amount of light into your home. The products we manufacture include our glazed solutions for flat roofs the **EOS Roof Lantern** and our two sleek rooflight options the **XP Sky View Skylight** & the **XP Pyramid Skylight.**

We also offer **Lean-to roofing** and we use our slim **Sky-Line** profile for bespoke solutions such as inset glass roofs.

We offer design-led solutions to suit you – designing, manufacturing, and installing our systems to specification.

We know that no two homes or projects are truly alike, which is why we tailor every aspect of the project to meet your needs at every stage of the process. The flexibility of our glazed roofing systems is such that they can be used to create aluminium conservatories, glass rooms and orangeries. With large glass expanses and a modern architectural aesthetic, our aluminium roofing products can make your dream home a stunning reality.

A visit to one of our showrooms is the perfect way to explore some of the stunning bespoke solutions we can create for you.

EOS Roof Lantern

XP SkyView Skylight

EOS Roof Lantern

XP Pyramid Skylight

Lean-to Roofing

CASE STUDY - THE COURTYARD

CENTRED ON PERFECTION

This luxurious self-build home has been constructed and finished to the highest standard. A perfect combination of light-filled open-plan spaces alongside small, cosy, and quirky areas creates the perfect family home. Boasting a huge courtyard entrance, the house is made up of two separate buildings bridged by fixed picture windows and large **XP Glide** sliding doors.

A mix of casement windows and large panoramic screens of curtain walling have created huge shaped windows which, sitting alongside the external render and contemporary stone cladding, have created a stunning exterior to this luxury home. The rear elevation has been completed in the same style with shaped curtain walling expertly installed into the roof gables, including a large, distinctive shaped gable in the master bedroom.

Contemporary stone cladding has again been used to great effect, this time on the flat roof extension that floods the interior with light, thanks to our **Sky-Line Roof Lantern**, which is very much in keeping with the rest of the property's premium aesthetic. Every room in this house is filled with premium architectural features, and this beautiful home contains multiple products that we manufacture and install daily.

It is the flexibility of our product portfolio, and our short lead times, that allow homeowners to design their dream home and still have the luxury of dealing with just one company who will handle the job from initial sales contact right through to the finished project.

CASE STUDY - STONE GRANGE

THE BEST OF BOTH WORLDS

This large, detached home contained two separate briefs. The front of the house was to be in-keeping with the rest of the street but with subtle, modern touches.

The rear of the house was to be completely transformed with a huge, double storey extension intended to create a sociable, flexible, and light-filled space, with a more modern appearance than the front of the house.

Our slim-framed aluminium windows in white suit the front of the home perfectly, a luxurious detached property now benefiting from crisp, white windows complete with leaded lights for a more traditional appearance. The bold, distinctive aluminium entrance door adds a contemporary twist to this classic looking property and gives an indication of the contemporary décor once inside the house.

The rear of the property is nothing short of spectacular, a fantastic combination of our picture, tilt and turn and casement windows, alongside bi-folding doors, and huge sliding doors set over three floors and two separate outdoor patio areas.

The front of this property demonstrates how our products are ideal for traditional homes, and the rear showcases our capabilities for creating dramatic, modern spaces.

FRONT DOORS THAT MAKE THE PERFECT INTRODUCTION

Want to make a lasting first impression? Greet family, friends and guests with one of our expertly crafted front doors – an ideal addition to your dream home. Acting as a focal point, the front door is a key purchase. We take a design-led approach to ensure that our front doors meet your every expectation in quality, appearance and security.
We manufacture all our doors in the UK to the highest standards to guarantee you'll love your space from the very first moment.

Our Premium Entrance Doors

Expertly manufactured in-house to bespoke sizes, we fabricate our premium entrance doors & then bond both skins of the distinctive panels to both faces of the door sash to create a flush finish inside & out. After bonding we carefully store the doors & allow them to set for forty-eight hours to complete the manufacturing process. This method creates an extremely robust & secure front entrance door. Our Premium range offers the flexibility to choose the characteristics of your door through our selection of unique panel designs, huge range of colours & finishes, handle options & tailor-made sizes.

XP77 Entrance Doors

Faster lead times & a more conservative price are the two advantages our XP77 front doors have when compared to our Premium range. The doors are manufactured to the same exacting standards & offer many of the same benefits, but rather than the panel being bonded to the sash we glaze the panel into the door. Boasting eight distinct panel designs & available in any RAL colour, our XP77 range can really set the tone as the perfect entrance to your home.

Caverro

Linora

Arola

Caverro

Numira

Metris

PREMIUM ENTRANCE DOORS

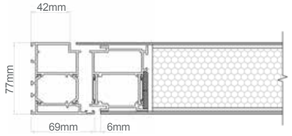
Secured by Design

Police Preferred Specification

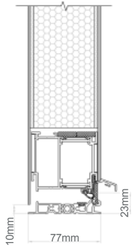
PRODUCT FEATURES:

- 77 mm frame depth
- 77 mm panel depth
- 72 mm insulating PU foam
- Seven-point locking
- Maximum size 1200 mm x 2550 mm
- Standard colours 9016 White, 9005 Black & 7016 Anthracite Grey
- Full range of RAL colours, and Elite & Essence finishes
- Stainless steel internal lever handle offered as standard
- Anti-snap/bump/drill/pick 3 star diamond rated security cylinders offered as standard
- Keyed alike with the rest of your Express doors as standard – meaning one key to open all of your Express doors
- Full range of sidelights and top-lights available
- Doors are completely bespoke
- Overall U values as low as 1.2 W/m2K
- Easy to maintain
- Can be inserted into Express curtain walling atriums
- The bespoke panel is manufactured in Germany so typical lead times are 5 – 7 weeks (lead times are a guideline only and do fluctuate throughout the year).
- Flush fitting double skin door panel offered as standard.

Side Jamb detail



Threshold detail



Premium Entrance Doors Opening inwards

XP77 DOORS

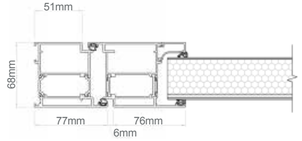
Secured by Design

Police Preferred Specification

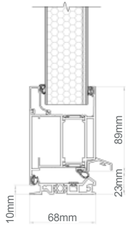
PRODUCT FEATURES:

- 68 mm frame depth
- 40 mm panel depth
- EPS 100 Polystyrene core
- 28mm solid MDF reinforcement within the panel.
- Seven-point locking
- Maximum size 1100 mm x 2300 mm
- Standard colours 9016 White, 9005 Black & 7016 Anthracite Grey.
- Full range of RAL colours and Elite & Essence finishes
- Option of three distinctive exterior steel bar handles available across all panel designs.
- Anti-snap/bump security cylinders offered as standard
- Keyed alike with the rest of your Express doors as standard – meaning one key to open all your Express doors
- Full range of sidelights and top-lights available
- Doors are completely bespoke
- Overall U values as low as 1.2 W/m2K
- Easy to maintain
- Five-year guarantee on the door panel
- Can be coupled with the full range of Express folding door and window products
- Can be inserted into Express curtain walling atriums

Side Jamb detail



Threshold detail



XP77 Doors Opening inwards

Entree - The panel is glazed into the XP77 doors

Verdure - Creating a slight step finish on the sash

A flush panel Liseo from our Premium range

PRODUCT OVERVIEW

XP77 DOORS

The more cost effective XP77 range is manufactured to the same exacting standards as our premium range. We manufacture the aluminium door but rather than bonding the panel to the sash we use a 40mm glazed in panel to create designer front doors that look great, whilst offering superb security features & thermal performance.

Boasting seven-point locking, bespoke sizes, huge colour choices & Secured by Design accreditation, our XP77 front entrance doors will create a statement entrance to any home.

Solid doors with steal trim

Entree Inlet Passage Verdure Portico Vigor Avenue Distinct

Entree

PREMIUM DOORS

All our doors are expertly manufactured to the same standard. We manufacture the aluminium front door & then double bond the 77mm deep panel to the door.

The door boasts a completely flush finish on both the external & internal face of the door. The double skin panel solidifies the door & adds to it's premium look & feel.

Our premium range of entrance doors are Secured by Design accredited for extra piece of mind.

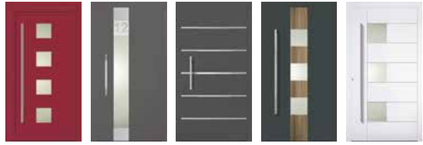
Solid doors with no glass inserts

Liseo Bentano

Solid designs with option for glazed inserts

Tira Sila Swing Metris

Solid doors with glass inserts



Dicoma Numira Linora Arola Caverro

Liseo

CASE STUDY – AMBER HEIGHTS

BRING AN OLD BUILDING TO LIFE

The owners of this traditional detached property in Surrey wanted to replace their existing timber windows and doors with aluminium to not only refresh the look of the home but to benefit from maintenance free doors and windows. The home's upgrade included removing an old conservatory and replacing with a pitched roof extension to create an open plan kitchen and dining area that would connect with the large rear garden.

Due to the size of the property, we have installed various single and French doors throughout, but the rear elevation reaps the main benefit of our products with three **XP View** bi-folding doors utilised to stunning effect. The kitchen extension contains full height glazing on its three elevations. A six panel bifold door runs the full width of the space, while the larger return can be completely opened also with a three panel bifold complete with everyday access door, which is mirrored on the smaller return by a matching side door. The full height folding doors ensure that the kitchen is bathed in natural light, whilst drinking in the beautiful Surrey countryside. The doors meet on two corners fixed to two structural steel posts. After the installation was complete, we measured and installed bespoke, insulated aluminium pressings to minimise the thickness of the steel and to ensure a cohesive look to the three separate doors, which form the glazed perimeter of the new extension.

CASE STUDY - HIGHFIELD VIEW

A UNIQUE WELCOME

The owners of this property were determined to achieve a completely individual look with their front door and windows. Whilst a grey RAL shade is the usual choice for this style, they opted for a textured Mocha finish. This ensured the front of the house looks both beautifully modern and truly unique.

AN IMPRESSIVE FRONT ELEVATION

All the elevations of this home are dominated by our glazing products and all the interior rooms benefit from them also but the front elevation perfectly sets the tone to this newly built home. Clean lines & thin aluminium frames were the perfect combination for this superbly constructed property. The ground floor boasts slim framed aluminium casement windows sat nearly against the cream house render. The Premium Entrance door in our Linora design is flanked by two sidelights sitting below a large structural steel.

The glazed entrance atrium then runs all the way up to the roof ridge, two additional windows separated by another structural steel are all blended with external and internal aluminium pressings to create the appearance of one large window running from top to bottom.

This theme continues with the remaining upper floor windows. Large format shaped windows are positioned either side of the entrance atrium again two windows fixed top and bottom of a structural steel. A unique shaped apex window completes the expansive glazing on the front elevation. All the elevations of this home are dominated by our glazing products and all the interior rooms benefit from them also.

CREATE YOUR DREAM HOME WITH EXPRESS

Get your project started by visiting one of our showrooms in Leeds, Glasgow, Redhill or Romford.

FIND OUT HOW WE CAN BRING YOUR PROJECT TO LIFE

Visit one of our showrooms or exhibitions, or get in touch for a quote.

LEEDS

The Home Space from Express
Unit 23-24, Millshaw Park Lane, Millshaw Park Industrial Estate, Leeds LS11 0BL

01132 869 191

Opening times:
8.30am - 5.00pm weekdays
8.30am - 8.00pm Wednesdays*
9.00am - 5.00pm Saturdays
11.00am - 2.00pm Sundays

GLASGOW

Glasgow Showroom
18 Colvilles Park, East Kilbride,
Glasgow G75 0GZ

01355 207 141

Opening times:
8.30am - 5.00pm weekdays
8.30am - 8.00pm Wednesdays**
9.00am - 12.30pm Saturdays

REDHILL

Redhill Showroom
Units 18-17, Redhill 23 Business Park,
29 Holmethorpe Avenue, Redhill RH1 2GD
(To find us by GPS use RH1 2NL)

01737 760 744

Opening times:
8.30am - 5.00pm weekdays
8.30am - 8.00pm Wednesdays**
9.00am - 5.00pm Saturdays

ROMFORD

Romford Showroom
Unit 11B Trade City, Ashton Road,
Romford, Essex, RM3 8UJ

01708 957 457

Opening times:
8.30am - 5.00pm weekdays
8.30am - 8.00pm Wednesdays**
9.00am - 5.00pm Saturdays

* Late night opening every Wednesday until 8.00pm throughout the year at Leeds.

** Late night opening Wednesdays throughout March - October until 8.00pm.
By appointment only throughout November - February for Glasgow, Redhill and Romford Showrooms.

Our Redhill showroom is relocating to a new premises in Weybridge, in Spring 2022. Check our website for details.

0800 121 4809
sales@expressbifolds.co.uk

UKAS PRODUCT CERTIFICATION 012 · Secured by Design · Police Preferred Specification · CE · BSEN1279Pt2 KM 61099 · ISOQAR REGISTERED · UKAS MANAGEMENT SYSTEMS 0026 · SETTING THE STANDARD · SINCE 2007 ·

express bi-folding doors