Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BU[illegible]TION PERMIT

WITHDRAWN

Permit Number: 090030

Please Read Application And Notes, If Any, Attached

This is to certify that BRUNI JAMES /R Connolly & [illegible]., Inc.

has permission to Fire damage repair to burned u[illegible] Bring co[illegible]non/ pa[illegible]-walls up[illegible]min STL 50 New insulation, new drywall, ne[illegible] w trim and cabinets

AT 85 PARK ST [illegible] C[illegible] 044 F010001

provided that the person or persons, fi[illegible] or co[illegible]on ac[illegible]ting this permit shall comply with all of the provisions of the Statutes of Ma[illegible]e and of the O[illegible]nces of the City of Portland regulating the construction, maintenance and use[illegible] buildings and stru[illegible]res, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.	Noti[illegible]tion o[illegible]spectio[illegible]nust be give[illegible]nd writte[illegible]ermissio[illegible]rocured befo[illegible]his bui[illegible]g or pa[illegible]hereof is lath[illegible] or oth[illegible]ed-in. 24 HOU[illegible]NOTICE IS REQUIRED.	A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. _____

Health Dept. _____

Appeal Board _____

Other _____
Department Name

_____
Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Issue Date:	CBL:
09-0030		044 F010001

Location of Construction:	Owner Name:	Owner Address:	Phone:
85 PARK ST	BRUNI JAMES	87 PARK ST	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	R Connolly & Co., Inc.	P.O. Box 8463 Portland	2072338651
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Alterations - Multi Family	R-6

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Multi Unit residential 'cgal use - 7 dwelling units	Multi Unit residential - Fire damage repair to burned unit Bring common/ party walls up to min STL 50 New insulation, new drywall, new trim and cabinets	$670.00	$65,000.00	2

FIRE DEPT: ☐ Approved ☐ Denied — Signature:

INSPECTION: Use Group: Type: — Signature:

Proposed Project Description:

Fire damage repair to burned unit Bring common/ party walls up to min STL 50 New insulation, new drywall, new trim and cabinets

WITHDRAW

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
ldobson	01/12/2009

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☐ Not in District or Landmark (yes)
☐ Wetland - all work is interior.	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
ok w/ condition Date: 1/27/09	Date:	Date: Any exterior work requires a separate review & approval from Historic Preservation

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT | ADDRESS | DATE | PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE | DATE | PHONE

General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: 85 Pork St.		
Total Square Footage of Proposed Structure	Square Footage of Lot	
Tax Assessor's Chart, Block & Lot Chart# 44 Block# F Lot# 10	Owner: James Bruni	Telephone: 773.4851
Lessee/Buyer's Name (If Applicable)	Applicant name, address & telephone: Robert J Connolly 3 upper minot rd Pownal, ME. 04069 233-8651	Cost Of Work: $ 45,000 Fee: $ 670 C of O Fee: $ 0

Current legal use (i.e. single family) multi unit

If vacant, what was the previous use? _____

Proposed Specific use: _____

Is property part of a subdivision? NO If yes, please name _____

Project description: Smoke Damaged owners unit. Bring common/partywalls up to min STC 50. new Insulation, new Drywall (Finished) new Trim, new cabinets

Contractor's name, address & telephone: R Connolly & Co Inc 3 upper minot rd Pownal, ME. 04069

Who should we contact when the permit is ready: Bob Connolly

Mailing address: Phone: 233-8651

Please submit all of the information outlined in the Commercial Application Checklist. Failure to do so will result in the automatic denial of your permit.

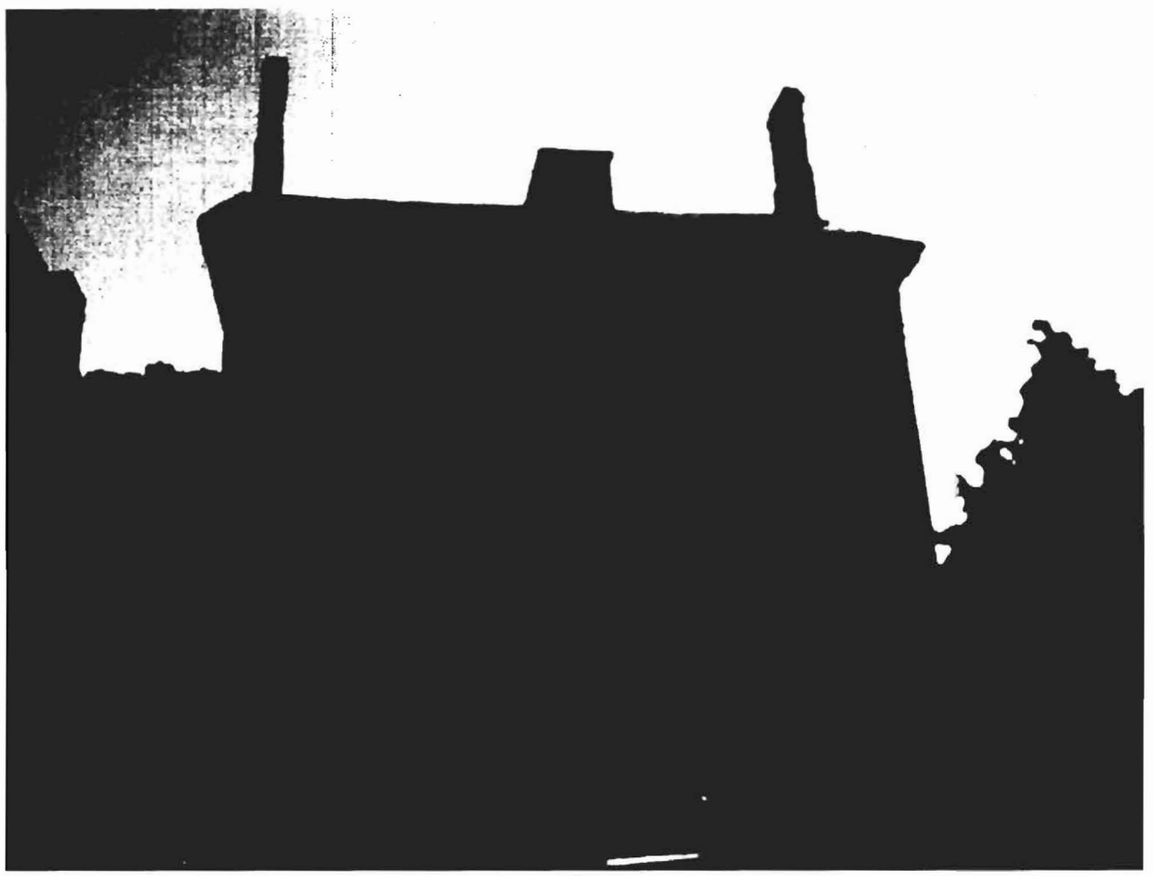
In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at www.portlandmaine.gov, or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

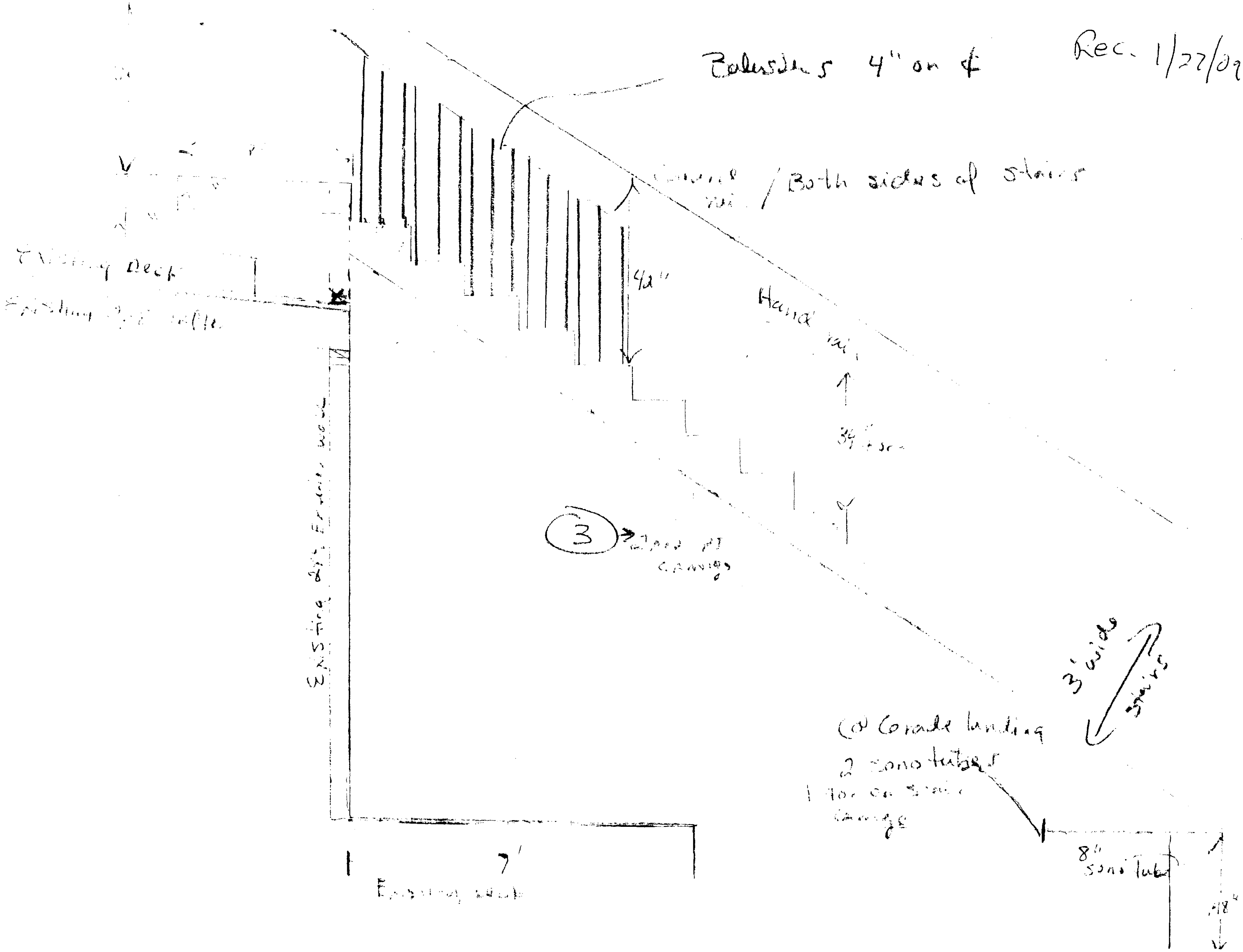
I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

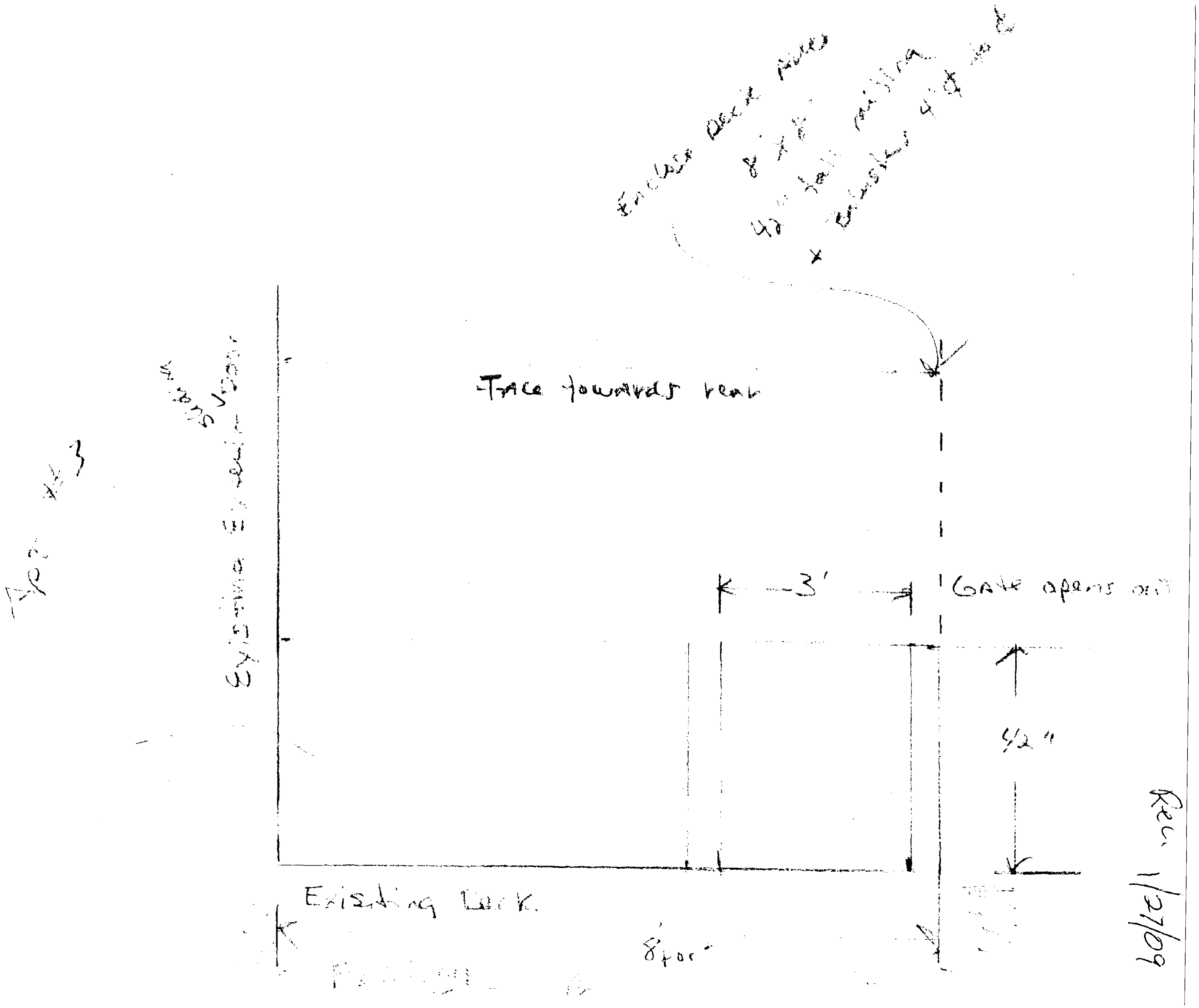
Signature of applicant: R Connolly	Date: 1-12-09

This is not a permit; you may not commence ANY work until the permit is issued.

JAN 12 2009



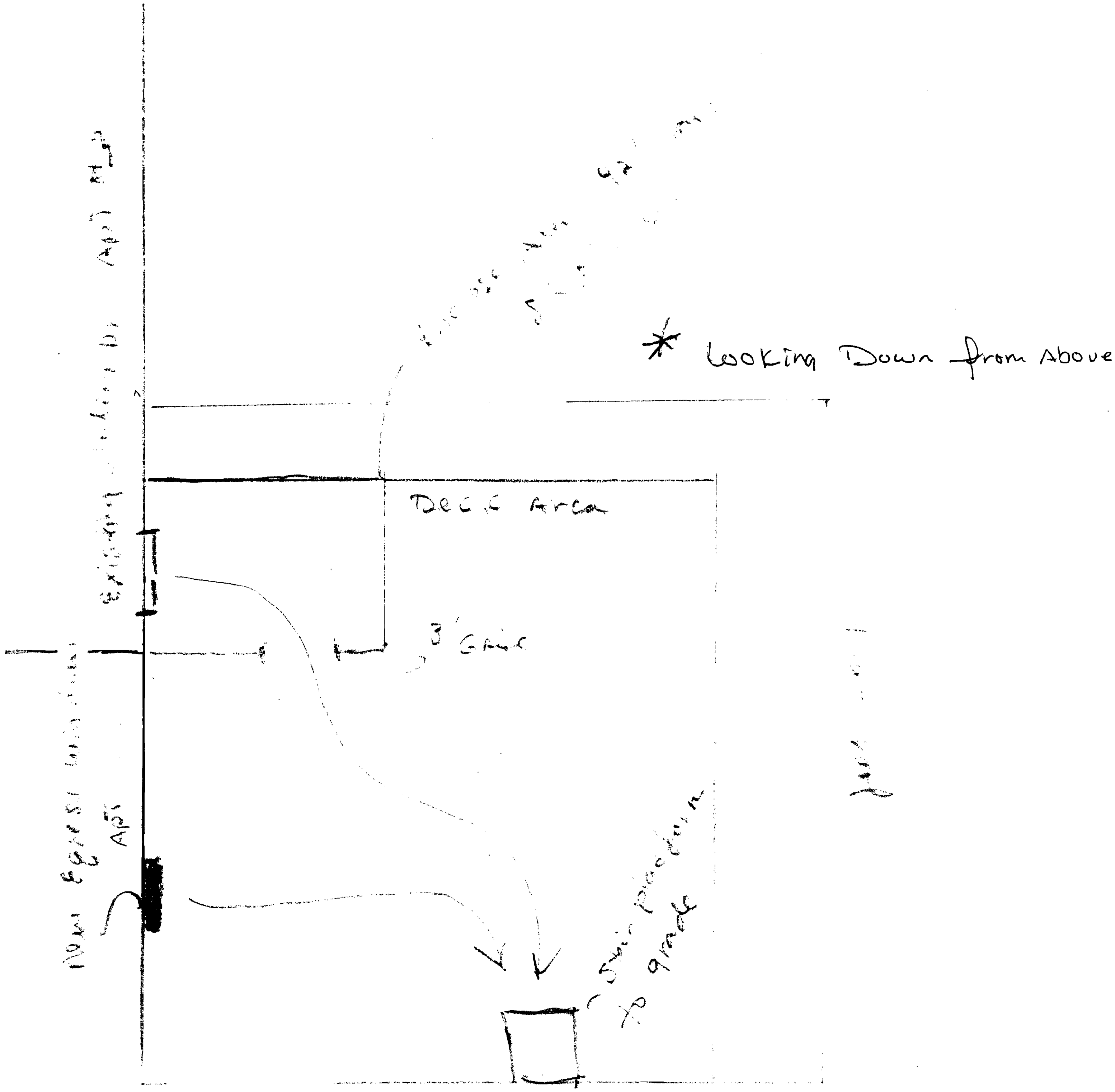

Rec. 1/27/09
Balusters 4" on ¢
/ Both sides of stairs
42"
Hand rail
3'
Existing deck
Existing wall
7'
3' wide stairs
Concrete landing
2 sono tubes
8" sono tube


Existing Deck
Gate opens out
3'
42"
Rev. 1/27/09

508-233-9651

Park St

rec. 1/27/09



R Connolly & Company Inc.

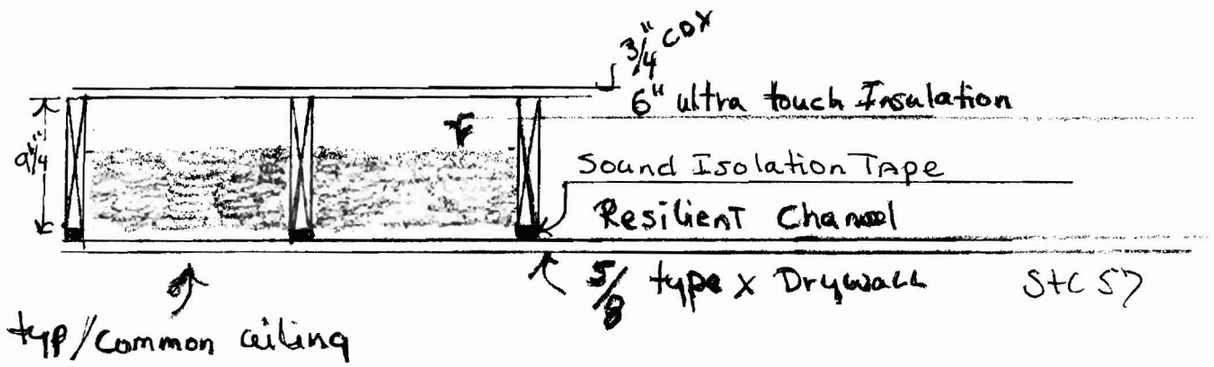
Commercial ▪ Residential

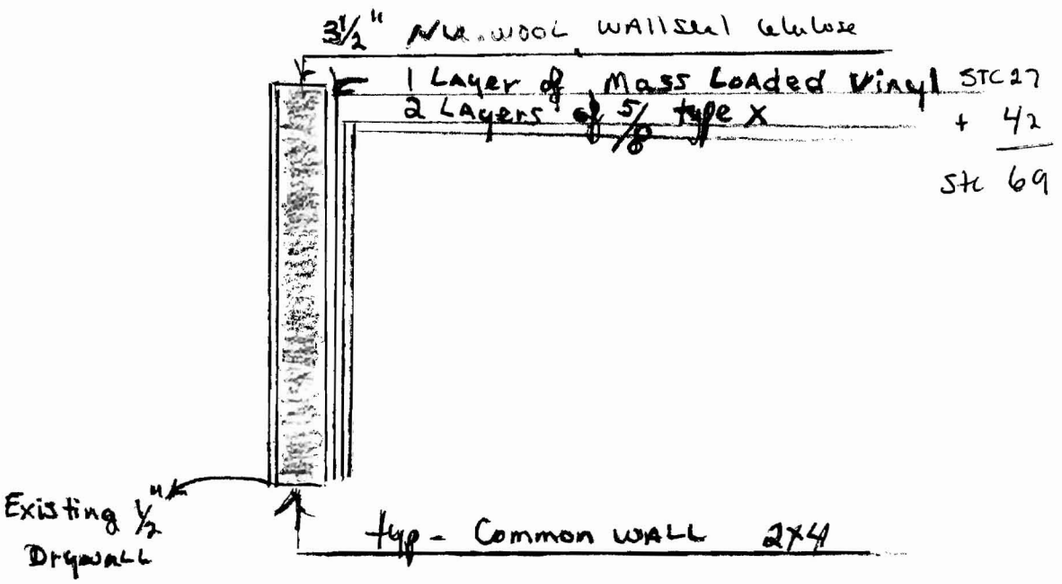
Building ▪ Remodeling

Robert J. Connolly
3 upper minot rd

(207) 688-4223
Pownal, Me. 04069

min STC 50





"Quality is not a matter of chance"

Submittal Sheet

CONTRACTOR:

JOB NAME:

DATE:

UltraTouch

ULTRATOUCH® INSULATION

Is a Class-A building material that can be used for both interior and exterior walls as well as most ceiling applications. UltraTouch can be installed in either wood or metal framing cavities and between furring channels by using a simple friction fit. The product is safe to handle and install without the need for protective clothing or special respiratory equipment.

- ***Excellent Noise Absorbti***
- ***Maximum R-Value***
- ***Class-A Fire Rated***
- ***No Itch or Skin Irritation***
- ***Resists Microbial Growth***
- ***No Formaldehyde***
- ***A LEED Eligible Product***

PHYSICAL PROPERTIES

	PERFORMANCE	TEST METHOD
Surface Burning Characteristics *(Fire Hazard Classification)*	Flame Spread 5 *(Class 1)* Smoke Developed 35 *(Class 1)*	ASTM E-84 UL-723
Corrosion Resistance	Passed	ASTM C-739
Fungi Resistance	Passed – No Growth	ASTM C-739
Bacteria Resistance	Passed – No Growth	ASTM C-739
Moisture Absorption	Passed – Less Than 15 %	ASTM C-739
Fire Test of Building Material	Passed – 1 Hour Rating	ASTM E-119 / UL-263

THERMAL/TECHNICAL INFORMATION

**Tested in accordance with ASTM C-518 at a temperature of 75° F. Higher R-values equal greater insulating power.*

RESIDENTIAL

PRODUCT CODE	R-VALUE*	THICKNESS	(MM)	WIDTH	(MM)	LENGTH	(M)	SQ. FT./BAG	WEIGHT
10000-01316	13	3.5"	89	16.25"	413	94"	2.34	106.07	48 lbs.
10000-01324	13	3.5"	89	24.25"	616	94"	2.34	126.63	58 lbs.
10000-01916	19	5.5"	140	16.25"	413	94"	2.34	53.04	30 lbs.
10000-01924	19	5.5"	140	24.25"	616	94"	2.34	63.32	35 lbs.
10000-02116	21	5.5"	140	16.25"	413	94"	2.34	53.04	37 lbs.
10000-02124	21	5.5"	140	24.25"	616	94"	2.34	63.32	45 lbs.
10000-03016	30	8.0"	203	16.25"	413	48"	1.22	54.20	43 lbs.
10000-03024	30	8.0"	203	24.25"	616	48"	1.22	64.64	57 lbs.

COMMERCIAL

10001-01325	13	3.5"	89	25"	635	94"	2.34	130.56	59 lbs.
10001-01925	19	5.5"	140	25"	635	94"	2.34	65.28	36 lbs.
10001-02125	21	5.5"	140	25"	635	94"	2.34	65.28	46 lbs.

ACOUSTICAL PERFORMANCE

Sound Absorption was tested in accordance with ASTM E90-02, ASTM C423 (Type A mounting per ASTM E 795)

			ABSORPTION COEFFICIENTS @ OCTAVE BAND FREQUENCIES (Hz)						
R-VALUE	THICKNESS	(MM)	125	250	500	1,000	2,000	4,000	NRC/STC
R-13	3.5"	89	0.95	1.3	1.19	1.08	1.02	1.0	1.15 NRC
R-13	3.5"	89	21	40	48	52	46	48	45 STC
R-19	5.5"	140	0.97	1.37	1.23	1.05	1.0	1.01	1.15 NRC
R-19	5.5"	140	40	53	57	63	53	63	57 STC

ceiling

PRODUCT COMPLIANCES

The physical properties of UltraTouch Insulation regularly meet the requirements, specifications, standards and building practices of the following organizations.

Environmental Specification #1350
ICC Evaluation Report #1134
LARR ICC ER #1134
BOCA Building Officials and Code Administrators
CABO Council of American Building Officials
ICBO International Conference of Building Officials
LEED Leadership in Energy and Environmental Design
SBCCI Southern Building Code Congress International

Bonded Logic INC.
24053 S. Arizona Avenue
Chandler, Arizona 85248
480-812-9114
480-812-9633 FAX

STC Ratings

Wood Stud Assemblies

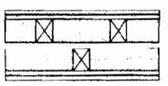
STC ratings of wall assemblies insulated with NU-WOOL® WALLSEAL® Insulation.

Testing done with full scale assemblies at Riverbank Acoustical Laboratories. Some walls extrapolated from other data.

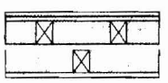
The diagrams and stated STC ratings listed below are intended to serve as a guide. Construction practices have an influence on final STC ratings. Nu-Wool® Company, Inc. cannot guarantee actual STC ratings. Flanking sound patterns, the integrity of the wall, and floor and ceiling construction are important factors in effective sound control.

Nu-Wool proprietary firewall designs

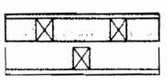
63 **U382:** Staggered wood studs 16" o.c.; double layer 5/8" type "C" gypsum board each side; WALLSEAL® 3-1/2" thick



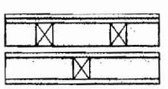
58 **U382:** Staggered wood studs 16" o.c.; double layer 5/8" type "C" gypsum board one side, single layer other side; WALLSEAL® 3-1/2" thick



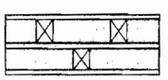
53 **U382:** Staggered wood studs 16" o.c.; single layer 5/8" type "C" gypsum board each side; WALLSEAL® 3-1/2" thick



58 **U369:** Staggered wood studs 16" o.c.; double layer 5/8" type "x" gypsum board one side, single layer other side; WALLSEAL® 3-1/2" thick



51 **U360:** Staggered wood studs 16" o.c.; single layer 5/8" type "x" gypsum board each side and between studs; WALLSEAL® 3-1/2" thick



WALL System

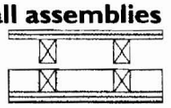
For more information, contact the technical department of Nu-Wool® Company, Inc. at 1-800-748-0128.

NU-WOOL® COMPANY, INC.

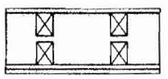
2472 Port Sheldon
Jenison, Michigan 49428
1-800-748-0128
www.nuwool.com

STC ratings for common wall assemblies

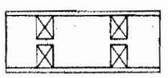
66 Double wood studs 16" o.c.; double layer 1/2" type "x" gypsum board each side, WALLSEAL® one side 3-1/2" thick.



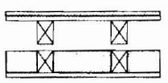
62 Double wood studs 16" o.c.; double layer 1/2" gypsum board one side, single layer other side; both cavities WALLSEAL® to thickness.



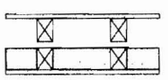
61 Double wood studs 16" o.c.; single layer 1/2" gypsum board each side; both cavities WALLSEAL® to thickness.



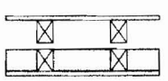
59 Double wood studs 16" o.c.; double layer 1/2" type "x" gypsum board one side, single layer other side; WALLSEAL® one side 3-1/2" thick.



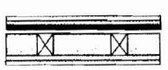
58 Double wood studs 16" o.c.; single layer 1/2" type "x" gypsum board each side; WALLSEAL® one side 3-1/2" thick.



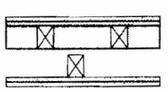
58 Double wood studs 16" o.c.; single layer 5/8" type "x" gypsum board each side; WALLSEAL® one side 3-1/2" thick.



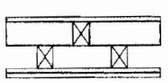
58 Single wood studs 16" o.c.; resilient channel one side; double layer 1/2" type "x" gypsum board each side; WALLSEAL® 3-1/2" thick.



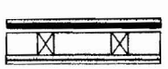
56 Staggered wood studs 24" o.c.; double layer 5/8" type "x" gypsum board each side; WALLSEAL® one side 3 1/2" thick.



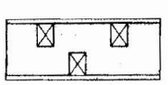
54 Staggered wood studs 24" o.c.; double layer 5/8" type "x" gypsum board one side, single layer other side; WALLSEAL® one side 3-1/2" thick.



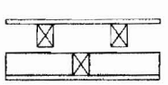
54 Single wood studs 16" o.c.; resilient channel; single layer 5/8" type "x" gypsum board one side, double layer other side; WALLSEAL® 3-1/2" thick.



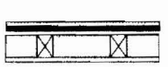
53 Staggered wood studs 16" o.c.; single layer 1/2" gypsum board each side; both cavities WALLSEAL® to thickness.



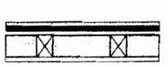
52 Staggered wood studs, 16" o.c.; single layer 5/8" type "x" gypsum board each side; WALLSEAL® one side 3-1/2" thick.



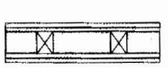
51 Single wood studs 16" o.c.;, resilient channel one side; single layer 5/8" type "x" gypsum board each side; WALLSEAL® 3-1/2" thick.



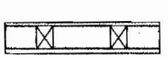
48 Single wood studs 16" o.c.; resilient channel one side; single layer 1/2" type "x" gypsum board each side; WALLSEAL® 3-1/2" thick.



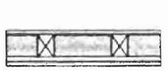
47 Single wood studs 16" o.c.; double layer 1/2" type "x" gypsum board each side, WALLSEAL® 3-1/2" thick.



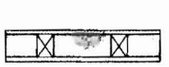
45 Single wood studs 16" o.c.; single layer 5/8" type "x" gypsum board each side; WALLSEAL® 3-1/2" thick.



42 Single wood studs 16" o.c.; double layer 1/2" gypsum board one side, single layer 1/2" gypsum board other side; WALLSEAL® 3-1/2" thick.



41 Single wood studs 16" o.c.; single layer 1/2" type "x" gypsum board each side; WALLSEAL® 3-1/2" thick



SoundAway Corporation

Residential and Commercial Soundproofing

Product Sheet 11001

SoundAway Barrier

SoundAway Barrier is a flexible non-reinforced mass loaded vinyl typically installed in wall or ceiling assemblies to reduce airborne noise. SoundAway Barrier is available in a variety of sizes and densities

Features

- High STC of up to 32
- 1 pound or 2 pound per square foot density (1/8" or 1/4" thickness)
- Available in 4' x 25', 4.5' x 25' rolls, and 4.5' x 15'

Applications

- Walls
- Ceilings
- Floors

Description

SoundAway Barrier adds mass to a wall, ceiling, or floor assembly to reduce airborne noise transmission. SoundAway Barrier is a one pound per square foot mass loaded vinyl offering industry leading performance with a rating of up to 26 STC. It is a cost-effective soundproofing material.

SoundAway Barrier Plus is a two pound per square foot mass loaded vinyl with the highest soundproofing rating of 32 STC. Upper frequency noise reduction exceeds 40 dB, as shown in the table below.

SoundAway Barrier is available in rolls measuring 4' x 25' and 4.5' x 30'. SoundAway Barrier Plus is available in rolls measuring 4.5' x 15'.

Also available with a pressure-sensitive-adhesive (PSA) backing.

Acoustic Transmission Loss

	125	250	500	1000	2000	4000	STC
1 lb./sq. ft.	13	14	22	26	32	37	**27**
2 lb./sq. ft.	19	19	27	34	38	43	**32**

WALL SYSTEM

1175 Park Center Drive, Suite A • Vista, CA 92081
866-768-6381 • 760-599-3985 • 760-599-4508 Fax
sales@soundaway.com
www.SoundAway.com

Rev. 1.0

ONLINE CERTIFICATIONS DIRECTORY

BXUV.U375
Fire Resistance Ratings - ANSI/UL 263

Page Bottom

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Listed or Classified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered as Classified, Listed, or Recognized.

Fire Resistance Ratings - ANSI/UL 263

See General Information for Fire Resistance Ratings - ANSI/UL 263

Shaft Liner System

APT 4 P

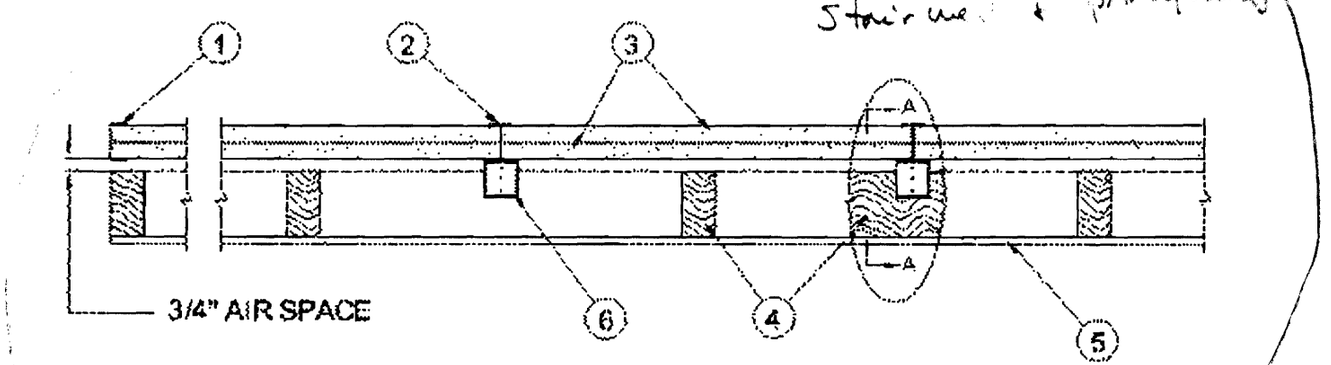
Stairwell & party walls

Design No. U375

October 15, 2008

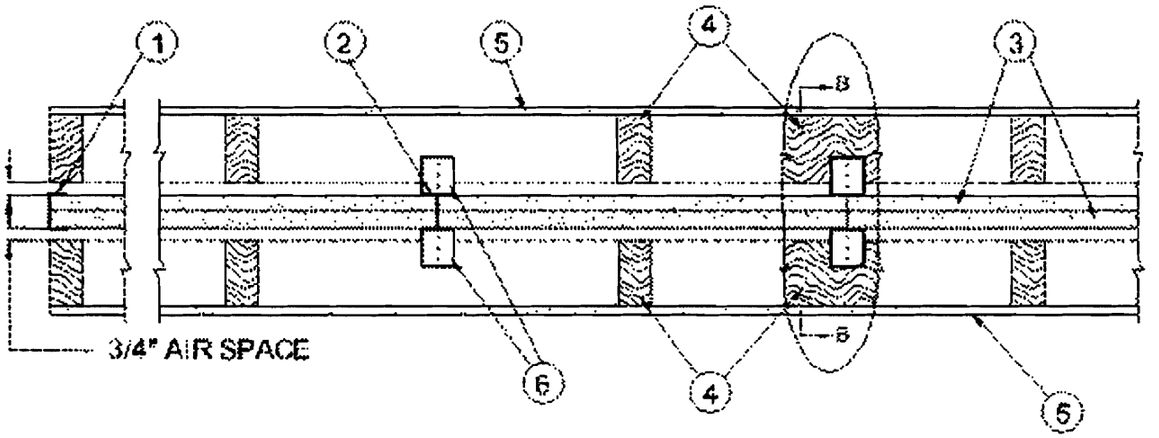
NonBearing Wall Rating - 2 HR

Finish Rating - 120 MIN



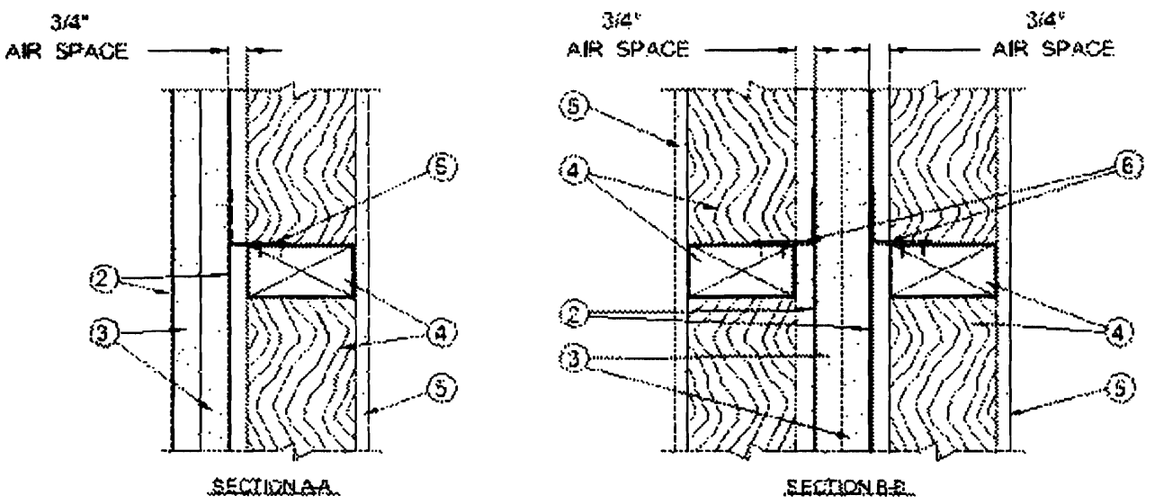
CONFIGURATION A

EXPOSED TO FIRE FROM AREA SEPARATION WALL SIDE ONLY

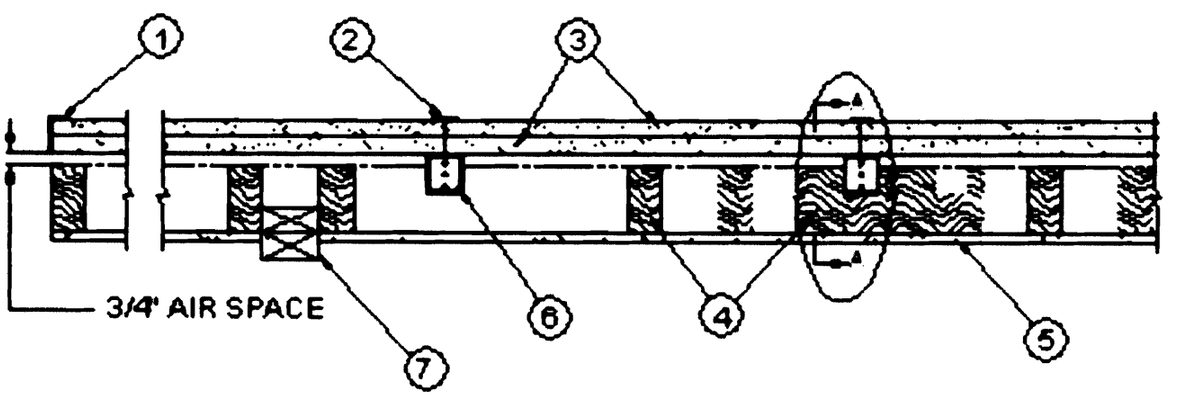


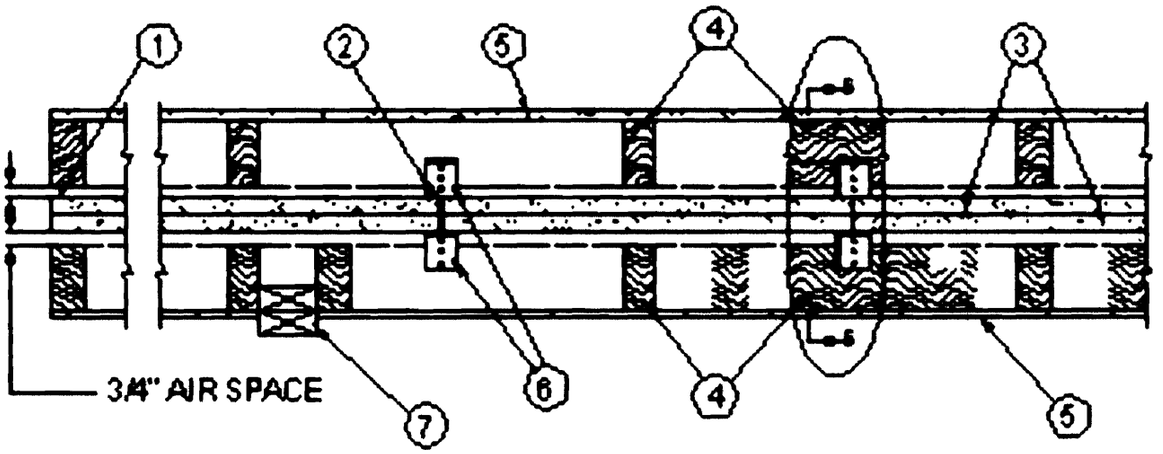
CONFIGURATION B

EXPOSED TO FIRE FROM EITHER SIDE



Configuration C





CONFIGURATION D

AREA SEPARATION WALL: — (Max Height - 44 ft)

1. **Floor, Intermediate or Top Wall —** 2 in. wide channel shaped with 1 in. long legs formed from No. 25 MSG galv steel, secured with suitable fasteners spaced 24 in. OC.

2. **Steel Studs —** Steel members formed from No. 25 MSG galv steel having "H" - shaped flanged spaced 24 in. OC; overall depth 2 in. and flange width 1-3/8 in.

3. **Gypsum Board* —** Two layers of 1 in. thick gypsum wallboard liner panels, supplied in nom 24 in. widths. Vertical edges of panels friction fitted into "H" - shaped studs.

AMERICAN GYPSUM CO — Types AG-S

TEMPLE-INLAND FOREST PRODUCTS CORP — Type TP-6

PROTECTED WALL: — (Bearing or Nonbearing Wall)

4. **Wood Studs —** Nom 2 by 4 in. max spacing 24 in. OC. Studs cross-braced at midheight where necessary for clip attachment. Min 3/4 in. separation between wood framing and area separation wall.

5. **Gypsum Board —** Classified or Unclassified - Min 1/2 in thick, 4 ft wide, applied either horizontally or vertically. Wallboard attached to studs with 1-1/4 in. long steel drywall nails space 8 in. OC. Vertical joints located over studs. (Optional) Joints covered with paper tape and joint compound. Nail heads covered with joint compound.

6. **Attachment Clips —** Aluminum angle, 0.063 in. thick, min 2 in. wide with min 2 in. and 2-1/4 in. legs. Clips secured with Type S screws 3/8 in. long to "H" studs and with Type W screws 1-1/4 in. long to wood framing through holes provided in clip. Clips spaced a max of 10 ft OC vertically between wood framing and "H" studs for separation walls up to 23 ft high. For separation walls up to 44 ft high, clips spaced as described above for the upper 24 ft. and the remaining wall area below requires clips spaced a max 5 ft OC vertically between wood framing and "H" studs.

7. **Non-Bearing Wall Partition Intersection —** (Optional) Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed together with two 3in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the wall.

*Bearing the UL Classification Mark

Last Updated on 2008-10-15

H-STUD AREA SEPARATION WALL SYSTEM

The fire-protection of gypsum-based Area Separation Walls is demonstrated in dramatic fashion by the results of this actual townhouse fire in which the two-hour fire-rated assembly performed as expected in protecting adjacent properties. Break-away feature allowed collapse of fire-side structural framing without pulling down the entire wall.

DESCRIPTION

SOLID TYPE AREA SEPARATION WALL

The H-Stud Area Separation Wall consists of 2" light-gauge steel H-Studs which secure two layers of 1" Fire-Shield Shaftliner or 1" Fire-Shield Shaftliner XP board between adjacent studs.

Shaftliner board is faced with green moisture-resistant paper and Shaftliner XP board is faced with purple moisture/mold/mildew-resistant paper on both sides for protection against weather during installation. Shaftliner panels have a beveled edge configuration allowing for simple installation into the H-Studs.

The H-Studs are secured at the foundation floor by the flanges of H-Stud Track. The same track is used back-to-back at intermediate floors to provide a splicing means so that the System can be erected one floor at a time. H-Stud Track is also used at the roof line or at the parapet and at wall ends.

For a fire-rated assembly without the need for battens, a minimum 3/4" air space shall be maintained between the H-Stud assembly and any adjacent framing members. When a 3/4" air space cannot be maintained, the H-Stud and H-Stud Tracks are covered by screw-attached 6" wide battens fabricated from 1/2" Fire-Shield C Gypsum Board; or 1/2" Fire-Shield C Gypsum Board boards can be fastened to the H-Studs and joints* covered with tape and joint compound to provide a finished wall. Mineral wool or glass fiber can be installed in adjacent cavity shaftwalls to provide higher STC ratings.

Steel H-Stud framing members are attached on each side to adjacent framing with breakaway, heat softenable aluminum ASW Clips.

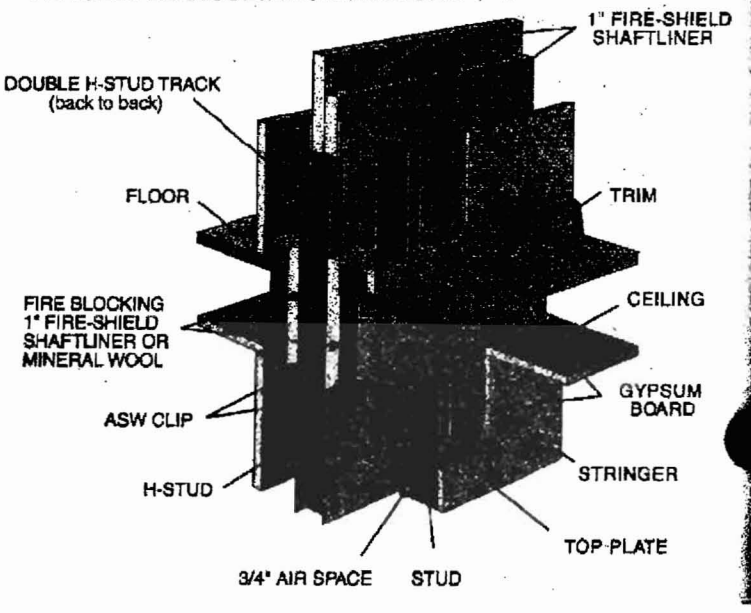
*Refer to UL Design U347.

NOTE: ICC ES Inc. Legacy Report 90-26.01 requires a 1" minimum air space.

TECHNICAL DATA

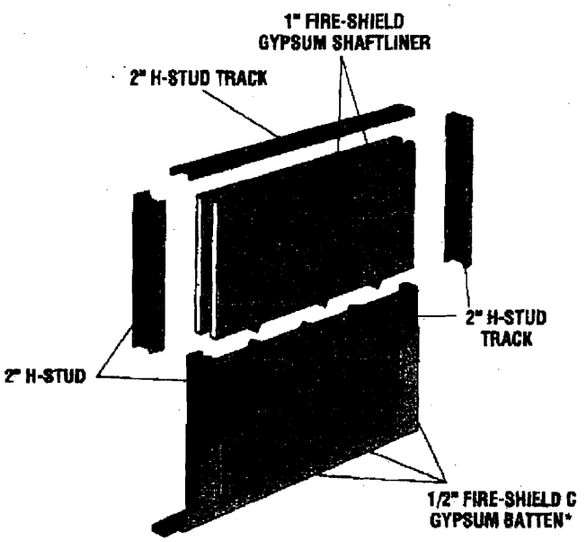
1. Area Separation Walls are nonload-bearing walls. They should not be used where exposed to constant dampness and/or water. Steel framing and XP Gypsum Board products permit temporary exposure to inclement weather during construction, but the constructed Area Separation Wall should be protected from inclement weather as soon as possible. Materials supplied to the job site should be stored properly, supported off the ground and protected from inclement weather.
2. The Area Separation Wall System may be built up to a maximum of 66' high.
3. Insulation in the Area Separation Wall must be protected from wetting and therefore shall not be installed until building is closed-in.
4. XP Gypsum Board or Gypsum Sheathing shall be used on faces of stud framing of Area Separation Walls which project beyond roof or side walls.

TYPICAL FLOOR/CEILING JUNCTURE



INTERIOR FACINGS

1. 2" H-Stud Area Separation Wall can be finished in a variety of ways depending on wall installation. For load-bearing applications, wood stud walls meeting required codes must be erected flanking the Area Separation Wall. Stud walls are then finished in whatever method is specified. For nonload-bearing applications, finished wall may be of any type meeting local codes including exposed Shaftliner and battens where appearance is not critical.



BASIC COMPONENTS OF 2" H-STUD AREA SEPARATION WALL (ASW CLIPS NOT SHOWN)

* Battens not required when minimum 3/4" air space is maintained between H-stud wall and adjacent wood framing.

SPECIFICATIONS

SECTION 09 21 16.33
AREA SEPARATION WALL

THE FOLLOWING PARAGRAPHS ARE FOR INSERTION INTO SECTIONS OF GENERIC SPECIFICATIONS OR GENERIC/PROPRIETARY SPECIFICATIONS COVERING GYPSUM BOARD PRODUCTS FOR AREA SEPARATION WALLS. THE NATIONAL GYPSUM COMPANY PRODUCT NAME FOLLOWS THE GENERIC DESCRIPTION IN PARENTHESES.

PART 1 GENERAL

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM):
   1. C 1396, Specification for Gypsum Board.

PART 2 PRODUCTS

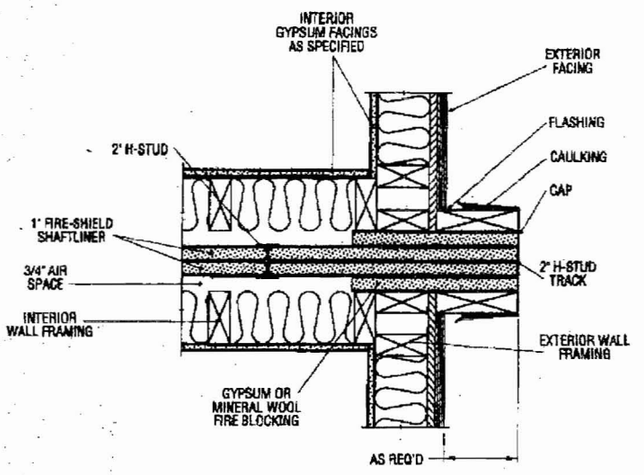
2.02 MATERIALS

A. Gypsum Board:
   1. Fire-Resistant Gypsum Shaftliner Board: A gypsum core shaftwall board with additives to enhance fire resistance of the core and surfaced with water repellant paper on front, back, and long edges and complying with ASTM C 1396, Type X (Gold Bond BRAND Fire-Shield Shaftliner).
      a. Thickness: 1"
      b. Width: 2'
      c. Length: 7' through 14'
      d. Edges: Beveled
   2. Fire-Resistant Mold-Resistant Gypsum Shaftliner Board: A gypsum core shaftwall board with additives to enhance fire resistance of the core and surfaced with a moisture/mold/mildew resistant paper on front, back, and long edges; and complying with ASTM C 1396, Type X (Gold Bond BRAND Fire-Shield Shaftliner XP).
      a. Thickness: 1"
      b. Width: 2'
      c. Length: 7' through 14'
      d. Edges: Beveled
      e. Mold and Mildew Resistance: Panel score of 10, when tested in accordance with ASTM D 3273
   3. Fire-Resistant Gypsum Board: A gypsum core wall board with additives to enhance fire resistance of the core and surfaced with paper on front, back, and long edges and complying with ASTM C 1396, Type X (Gold Bond BRAND Fire-Shield C Gypsum Board).
      a. Thickness: 1/2"
      b. Width: 4'
      c. Length: 6' through 16'
      d. Edges: Square, Tapered, or Beveled Taper (Sta-Smooth Edge)
   4. Fire-Resistant Mold-Resistant Gypsum Board: A gypsum core wall panel with additives to enhance fire resistance and the water resistance of the core; surfaced with a moisture/mold/mildew resistant paper on front, back, and long edges and complying with ASTM C 1396, type X (Gold Bond BRAND XP Fire-Shield C Gypsum Board).
      a. Thickness: 1/2"
      b. Width: 4'
      c. Length: 8' 10' or 12'
      d. Edges: Square or Tapered
      e. Mold and Mildew Resistance: Panel score of 10, when tested in accordance with ASTM D 3273

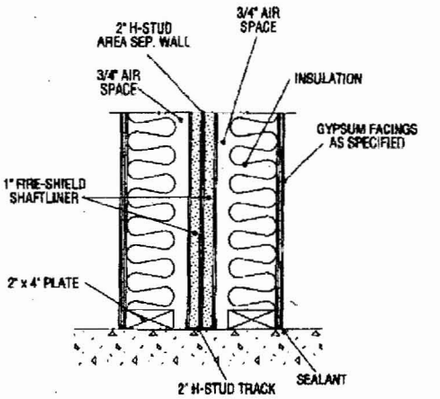
PART 3 EXECUTION

3.01 INSTALLATION

A. General: In accordance with the manufacturer's recommendations, National Gypsum Company *"Gypsum Construction Guide."*



PROTRUDING EXTERIOR WALL*
09265L
Scale: 1" = 1'-0"



TYPICAL FOUNDATION DETAIL*
09265H
Scale: 1/2" = 1'-0"

*When a 3/4" air space cannot be maintained between the H-Stud assembly and adjacent framing members, 1/2" Fire-Shield C Gypsum battens are required to cover H-Studs and H-Stud Track.

RECOMMENDATION

Order H-Studs and 1" Fire-Shield Shaftliner according to the following outline:

Basement wall section – length equal to distance from foundation floor to approximately 3" above floor line of first floor.

Intermediate floors – length equal to distance between floor lines.

Topmost floor – length to extend to top of parapet wall or to roof intersection, depending on detail.

BASEMENT WALL INSTALLATION

1. Beginning at foundation floor, attach 2" H-Stud Track to concrete with power-driven fasteners spaced 24" o.c. Apply acoustical sealant along edges of track at floor line.
2. Install H-Stud Track on foundation walls where Area Separation Wall intersects, if applicable. Fasten with power-driven fasteners 24" o.c. Caulk edges as with floor track.
3. At intersection of foundation or exterior wall and Area Separation Wall begin erecting by inserting first layer of 1" Shaftliner into floor and wall track. Insert second layer back-to-back with first and seat into floor and wall track. Shaftliner and studs may be set into position from the basement floor or fed down through the space provided in the wood framing from the floor above.
4. Making sure that both pieces of Shaftliner are seated all the way into the floor and wall tracks and that their edges are flush, insert an H-Stud into the floor track and engage the H-Stud legs over the long edges of the Shaftliner boards. Seat the H-Stud fully so the board edges contact the stud web.
5. Continue in this manner, erecting two thicknesses of Shaftliner, and installing the legs of the H-Stud over the Shaftliner edges until wall is completed. Again, make sure all studs and boards are tightly pushed together. Floor track may be screw fastened to H-Studs with 3/8" Type S pan head screws to assist with installation.
6. If the Area Separation Wall terminates at a foundation wall, the last two Shaftliner boards will have to be inserted from the floor above. Boards are pushed down into the channel formed by the previous H-Stud's legs and the legs of the wall track.
7. If the Area Separation Wall terminates at or past a framed wall, insert the last boards conventionally and cap the end of the Area Separation Wall with 2" H-Stud Track. Fasten H-Stud track flanges at all corners on both sides with 3/8" Type S pan head screws.
8. The top edge of the erected wall is then capped off by placing 2" H-Stud Track over studs and boards. Track may be screw fastened to H-Studs with 3/8" Type S pan head screws to assist with installation.
9. Attach studs to adjacent wood framing with ASW Clips. Secure the clips to the studs with one 3/8" Type S Pan Head Screw through the short leg of the clip. The ASW Clips may be attached directly to the steel studs or through the gypsum board batten face into the studs.
10. A minimum 3/4" air space shall be maintained between the H-Stud assembly and any adjacent framing members.* When a 3/4" air space cannot be maintained, gypsum board batten strips are installed over H-Studs and H-Stud Track on both sides of the wall. 3" wide battens are installed over H-Stud Track at foundation and roof. 6" battens are screw-attached to H-Studs with 1" Type S screws spaced 12" o.c. screwed into alternate legs of H-Stud. Battens are cut from sheets of 1/2" Fire-Shield C Gypsum Board.

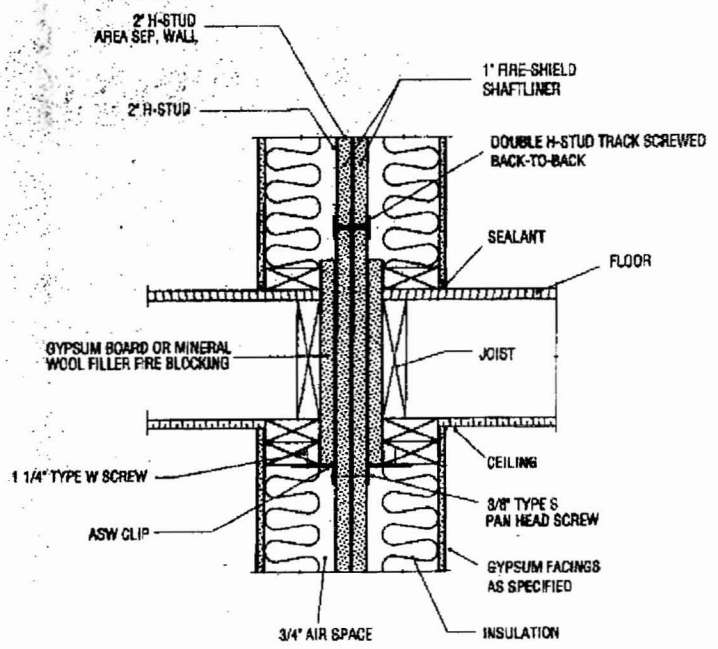
INTERMEDIATE FLOORS AND ROOF INSTALLATION

1. Attach 2" H-Stud Track to the already installed capping track of the lower floor's wall. This back-to-back track installation allows the Area Separation Wall to be erected one floor at a time. Secure the two tracks together with two 3/8" Type S pan head Screws 24" o.c. Stagger back-to-back track joints a minimum of 12".
2. Erect Shaftliner and H-Studs in the same manner as for the basement wall, steps 4-10, except that starting and ending procedures vary depending on the exterior wall intersection detail. See drawing details.
3. At roof intersection the walls are capped-off with H-Stud track. Track may be fastened to H-Stud with 3/8" Type S pan head screws to assist with installation. H-Studs are fastened to wood framing with ASW Clips. The specific framing procedure varies according to roof junction drawing details.
4. Fire blocking must be provided at intermediate floors and roof locations as shown in drawing details. Mineral wool or gypsum board filler may be used.

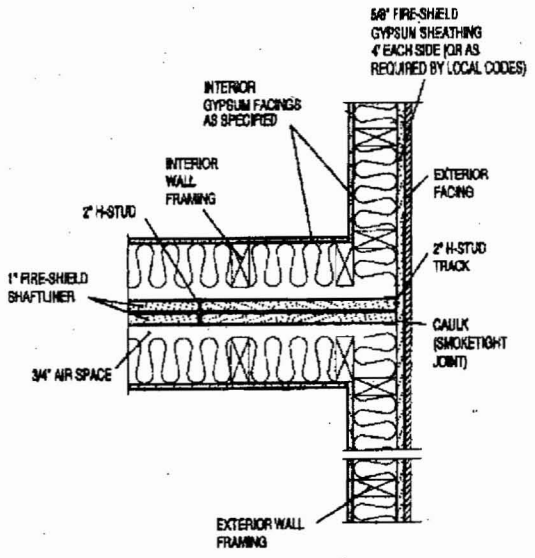
*Refer to UL Design U347.

NOTE: ICC Es, Inc. Legacy Report 90-26.01 requires a 1" minimum air space.

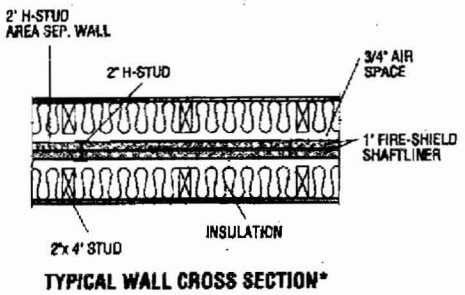
DETAILS



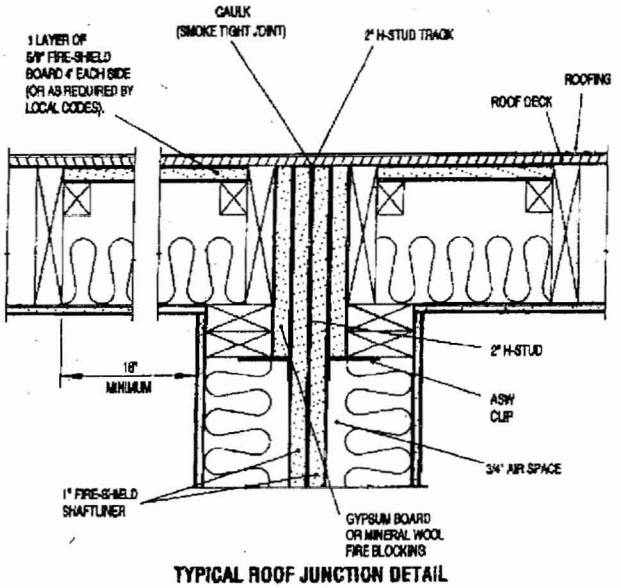
INTERMEDIATE FLOOR INTERSECTION*
LOCATION OF ASW CLIPS
09265I
Scale: 1" = 1'-0"



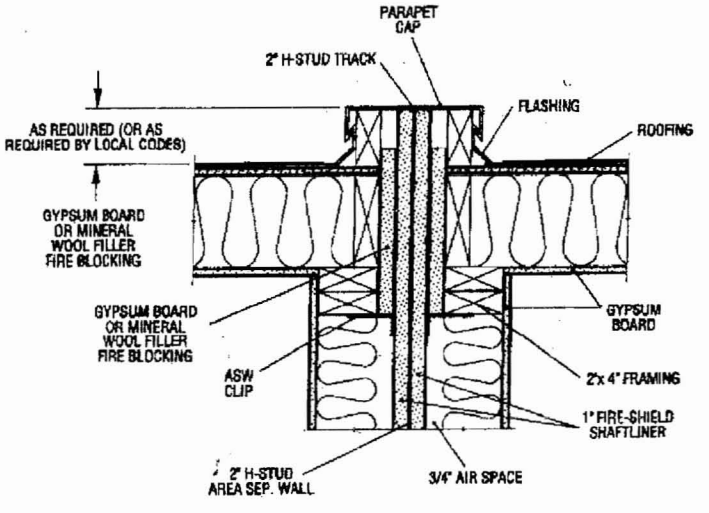
EXTERIOR WALL INTERSECTION
09265M
Scale: 1" = 1'-0"



TYPICAL WALL CROSS SECTION*
09265G
Scale: 1/2" = 1'-0"



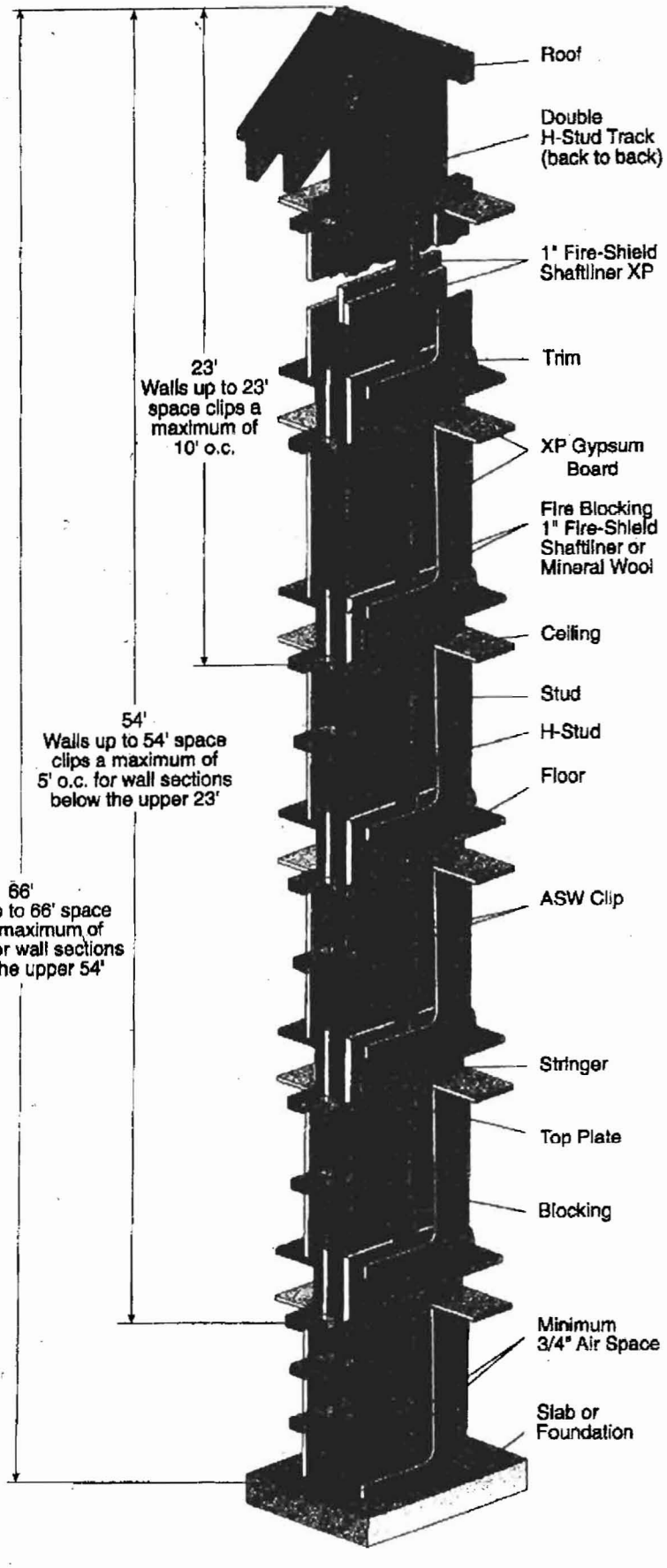
TYPICAL ROOF JUNCTION DETAIL
09265K
Scale: 1" = 1'-0"



TYPICAL ROOF PARAPET DETAIL
09265J
Scale: 1" = 1'-0"

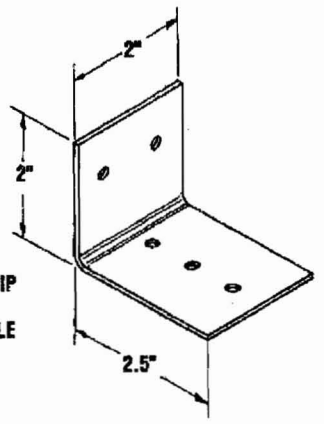
**When a 3/4" air space cannot be maintained between the H-Stud assembly and adjacent framing members, 1/2" Fire-Shield C Gypsum battens are required to cover H-Studs and H-Stud Track.*

AREA SEPARATION WALL LIMITING HEIGHTS



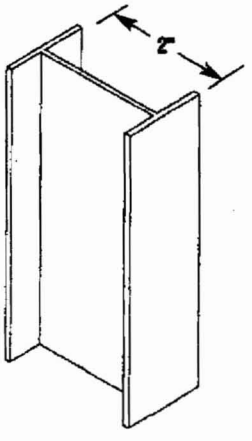
AREA SEPARATION WALL CLIP

The framing attachment ASW Clips are made from 0.050" aluminum alloy that softens at about 1000°F. They are formed in the shape of an angle and are available 2" wide with legs either 1" x 2", 1" x 2.5" or 2" x 2.5". Clips are attached to vertical steel H-Stud framing using one 3/8" Type S pan head screw and to adjacent framing with one 1 1/4" Type W screw.

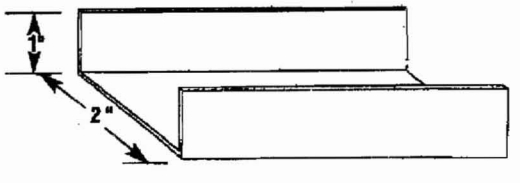


.050 ASW CLIP

.063" THICK AVAILABLE ON SPECIAL ORDER



H-STUD



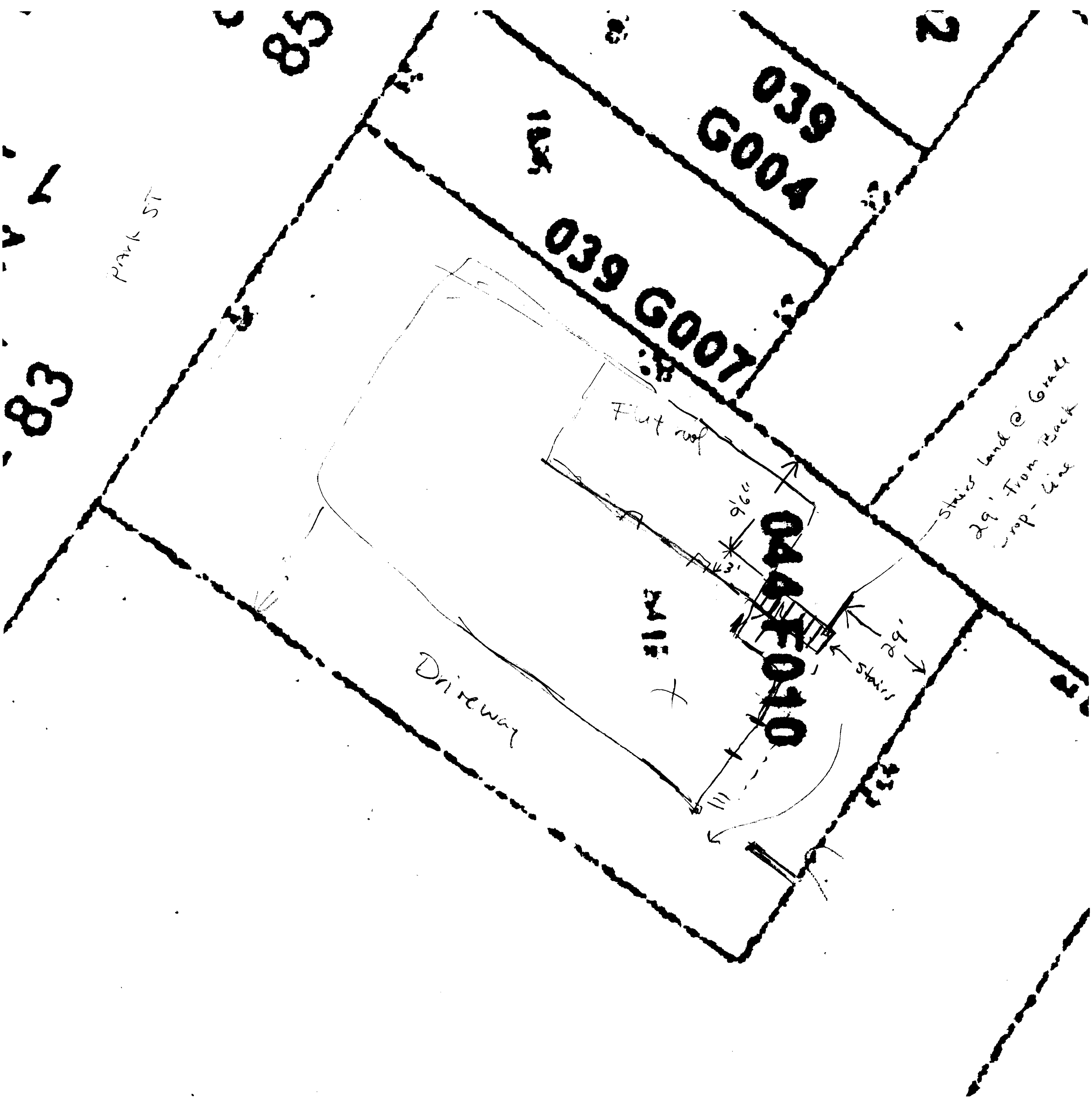
H-STUD TRACK

TRC

[redacted]

Add Egress window / Bedroom

PT – Stairs to Grade


85
83
Park St
039 G004
039 G007
044E010
Flat roof
Driveway
9'6"
3'
29'
stairs
stairs land @ Grade
29' from back
prop-line