Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUREAU OF INSPECTION

PERMIT

Please Read Application And Notes, If Any, Attached

Permit Number: 040917

PERMIT ISSUED
JUL 16 2004
CITY OF PORTLAND

This is to certify that Richards Tammy K /Built To st

has permission to build 11-6" x 16' addition

AT 71 Melbourne St 015 F019001

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, 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.

Notification of inspection must be given and written permission procured before this building or part thereof is lathed or closed-in. 48 HOUR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

7/16/04

OTHER REQUIRED APPROVALS

Fire Dept. _____

Health Dept. _____

Appeal Board _____

Other _____

DepartmentName

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 ISSUED
JUL 16 2004
CITY OF PORTLAND

Permit No:	Issue Date:	CBL:
04-0917	JUL 16 2004	015 F019001

Location of Construction:	Owner Name:	Owner Address:	Phone:
71 Melbourne St	Richards Tammy K	71 Melbourne St	207-749-6720
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Built To Last	212 West Valentine Street Westbrook	2078316855
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**(zone:**
		Additions - Dwellings	R-6

Past use:	Proposed Use:	Permit Fee:	Cost of Work	CEO District:
residential	residential - build 11-6" x 16' addition	$309.00	$31,875.00	1

3 Stories

FIRE DEPT: ☐ Approved ☐ Denied — Signature: N/A

INSPECTION: Use Group. R-3 Type. 5A BOCA 1999 — Signature

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: N/A Date:

Proposed Project Description:
build 11-6" x 16' addition

Permit Taken By:	Date Applied For:
tmm	07/02/2004

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
☐ Wetland	☐ 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
Date: 7/16/04	Date:	Date: 7/16/04

OK

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

City of Portland, Maine - Building or Use Permit

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

Permit No:	Date Applied For:	CBL:
04-0917	07/02/2004	015 F019001

Location of Construction:	Owner Name:	Owner Address:	Phone:
71 Melbourne St	Richards Tammy K	71 Melbourne St	207-749-6720
Business Name:	**Contractor Name:**	**contractor Address:**	**Phone**
	Built To Last	212 West Valentine Street Westbrook	(207) 831-6855
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	
		Additions - Dwellings	

residential - build 11-6" x 16' addition	build 11-6" x 16' addition

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Tammy Munson **Approval Date:** 07/16/2004

Note: **Ok to Issue:** ☐

1) This is NOT an approval for an additional dwelling unit. You SHALL NOT add any additional kitchen equipment including, but not limited to items such as stoves, microwaves, refrigerators, or kitchen sinks, etc. Without special approvals.

2) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tammy Munson **Approval Date:** 07/16/2004

Note: **Ok to Issue:** ☑

1) **As** discussed, this permit DOES NOT include the replacement of the rear fire escape. A separate permit must be pulled for that.

2) **As** discussed, hardwired interconnected battery backup smoke detectors shall be installed in all bedrooms, on every level, and in a common area.

3) Permit approved based on the plans submitted and reviewed w/owner/contractor, with additional information as agreed on and as noted on plans.

4) Separate permits are required for any electrical, plumbing, or heating.

Comments:

7/2/04-tmm: Need 11" x 17" plans, better detail on 5A construction, details on rear stair, winder detail, anchor bolts, and size of access panel to crawl space. - went over w/owner

7/16/04-tmm: **ok** to issue - rec'd all of the above.

Residential 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: 71 Melbourne Street

Total Square Footage of Proposed Structure: 184

Square Footage of Lot: 3440

Tax Assessor's Chart, Block & Lot
Chart# | Block# | Lot#
15 | F-19

plan book 1 page 41

Owner: Tammy K. Richards

Telephone: 207-749-6720 (cell)

Lessee/Buyer's Name (If Apphcable)

Applicant name, address & telephone:
Tammy K. Richards
71 Melbourne St.
Portland, ME 04101

Cost Of Work: $ 31,875

Fee: $ 309.00

Current Specific use: Owner occupied two family residence

Proposed Specific use: Same

Project description: Addition to owner's unit - addition consists of stairway, 2 small bedrooms, and study 11'-6" x 16'

Contractor's name, address & telephone. James Ham - Built to Last - 212 West Valentine St Westbrook. 207-831-6855

Who should we contact when the permit is ready: Tammy Richards

Mailing address: 71 Melbourne St
Portland, ME 04101

Phone: 207-749-6720

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

At the discretion of the Planning and Development Department, additional information may be required prior to permit approval For further information stop by the Building Inspections 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: [signature]

Date: June 18, 04

Permit Fee: $30.00 for the first $1000.00 Construction Cost, $9.00 per additional $1000.00 cost

This is not a Permit; you may not commence any work until the Permit is issued.

RECEIVED JUN 18 2004 DEPT. OF BUILDING INSPECTION CITY OF PORTLAND

Hi Tammy -

① The addition plans propose 30' height - I will speak with architect to lower to 29'

② Architect has drawn what he thinks is up to the code you mentioned - let me know if anything is missing

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

PERMIT ISSUED
JUN 18 2004
CITY OF PORTLAND

Permit No:	Issue Date:	CBL:
04-0835		015 F019001

Location of Construction:	Owner Name:	Owner Address:	Phone:
71 Melbourne St	Richards Tammy K	71 Melbourne St	749-6720
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Built To Last	212 West Valentine Street Westbrook	2078316855
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Foundation Only/Residential	R-6
Past Use:	**Proposed Use:**	**Permit Fee:**	**Cost of Work:** / **CEO District:**
2 family	2 family - 11'-6" x 16'-0" foundation only		$0.00 / 1

FIRE DEPT: ☐ Approved ☑ Denied — Signature: N/A

INSPECTION: Use Group: R-3 Type: SA BOCA 1999 — Signature:

Proposed Project Description:
11'-6" x 16'-0" foundation only

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)
Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied
Signature: Date:

Permit Taken By:	Date Applied For:
tmm	06/18/2004

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
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone OK	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: 6/18/04	Date:	Date: 6/18/04

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

Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUILDING INSPECTION

PERMIT

Please Read Application And Notes, If Any, Attached

Permit Number: **040835**

This is to certify that Richards Tammy K /Built To st

has permission to 11'-6" x 16'-0" foundation on

AT 71 Melbourne St C 015 F019001

provided that the person or persons, m or ion ac pting this permit shall comply with all of the provisions of the Statutes of M ne and of the O ances of the City of Portland regulating the construction, maintenance and u of buildings and ctures, 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.

N ication inspe n must g and w n permis n procu b e this ding or t therec la d or o sed-in. H R NOT EQUIRED.

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 _____

PERMIT ISSUED
JUN 18 2004
CITY OF PORTLAND

Department Name

Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

This page contains a detailed description of the Parcel ID you selected. Press the **New Search** button at the bottom of the screen to submit a new query.

Current Owner Information

Card Number	1 of 1
Parcel ID	015 F019001
Location	71 MELBOURNE ST
Land Use	TWO FAMILY
Owner Address	RICHARDS TAMMY K 71 MELBOURNE ST PORTLAND NE 04101
Book/Page	19248/098
Legal	15-F-19 MELBOURNE ST 71
	3440 SF

Valuation Information

Land	Building	Total
$32,660	$77,490	$110,150

Property Information

Year Built	Style	Story Height	Sp. Ft.	Total Acres
1910	Gambrel	2	2066	0.079

Bedrooms	Full Baths	Half Baths	Total Rooms	Attic	Basement
3	2		11	None	Full

Outbuildings

Type	Quantity	Year Built	Size	Grade	Condition

Sales Information

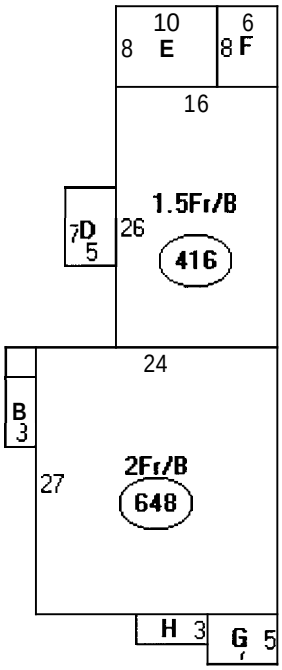
Date	*Type*	Price	Book/Page
04/03/2003	LAND + BLDING	$105,500	19248-98
08/01/1996	LAND + BLDING	$85,000	12654-222

Picture and Sketch

Picture **Sketch**

Click here to view Tax Roll Information.
Any information concerning tax payments should be directed to the Treasury office at 874-8490 or e-mailed.

New Search!



Descriptor/Area

A: 2Fr/B
648 sqft

B: FBAY/B
21 sqft

C: 1.5Fr/B
416 sqft

D: WD
35 sqft

E: WD
80 sqft

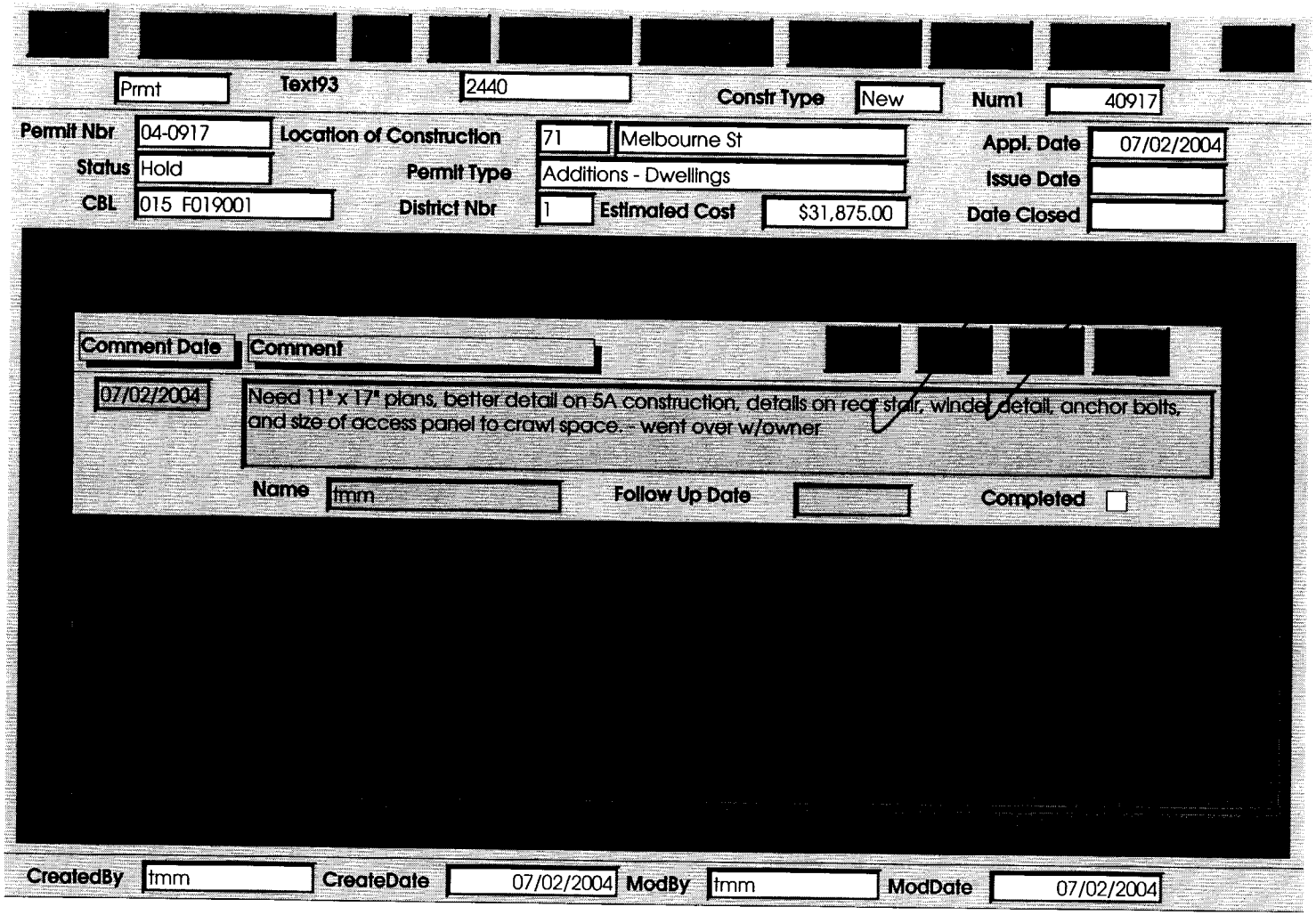
F: WD/EP
48 sqft

G: MT
35 sqft

H: FBAY/B
21 sqft

1304

1720
- 1304
416 cover left.
- 184 Addit.
232 sf left


Prmt
Text93
2440
Constr Type
New
Num1
40917
Permit Nbr
04-0917
Location of Construction
71
Melbourne St
Appl. Date
07/02/2004
Status
Hold
Permit Type
Additions - Dwellings
Issue Date
CBL
015 F019001
District Nbr
1
Estimated Cost
$31,875.00
Date Closed
Comment Date
Comment
07/02/2004
Need 11" x 17" plans, better detail on 5A construction, details on rear stair, winder detail, anchor bolts, and size of access panel to crawl space. - went over w/owner
Name
tmm
Follow Up Date
Completed
CreatedBy
tmm
CreateDate
07/02/2004
ModBy
tmm
ModDate
07/02/2004

Underwriters Laboratories Inc.

BXUV.U032
Fire Resistance Ratings - ANSI/UL 263

Page-Bottom **Questions?** [redacted]

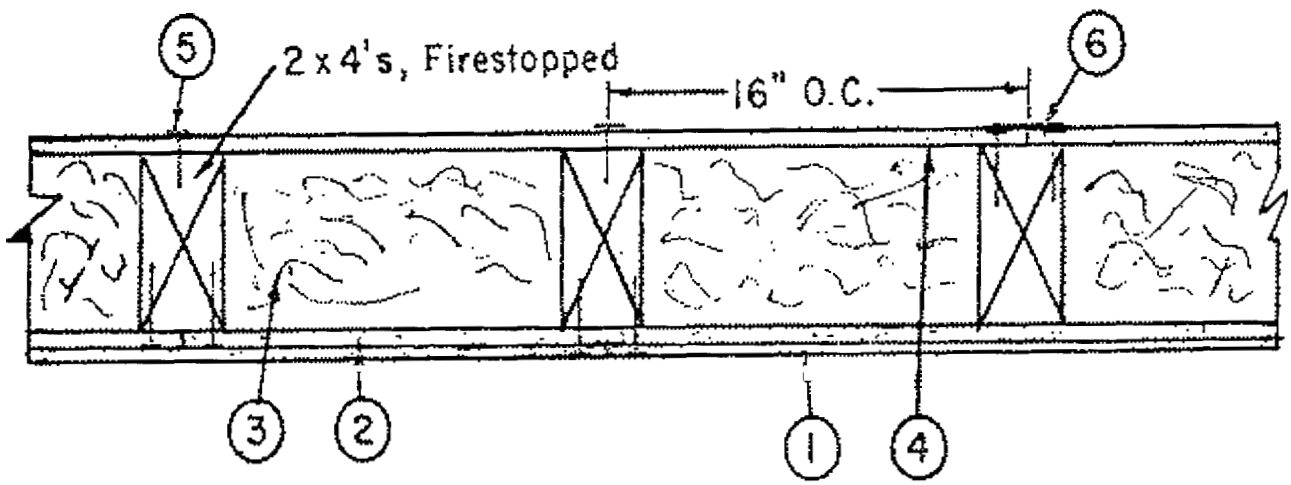
Fire Resistance Ratings - ANSIAJL 263

Guide Information

Design No. U032

May 03,2001

Bearing Wall Rating — 1 HR.



1. **Hard board Paneling — Mineral and Fiber Boards*** — Untreated panels nom 7/16 or 1/2 in. thick, 6 to 48 in. wide. Ship lapped panel sidings are fastened to framing members with 10d rust-resistant nails thru the lap spaced 6 in. OC vertically. Butted panel siding fastened to framing members with 10d nails 3/8 in. from edge spaced 6 in. OC vertically. Lap sidings fastened to framing members with 12d nails 3/8 in. from edges spaced 16 in. OC horizontally. (Aluminum joint molding as required for lap products).

MASONITE CORP

1A. In lieu of Item 1, the following Molded Plastic* may be used: Solid vinyl siding mechanically secured to framing members in accordance with manufacturer's recommended installation instructions.

ALSIDE, DIV OF

ASSOCIATED MATERIALS INC

GENTEK BUILDING PRODUCTS LTD

HEARTLAND BUILDING PRODUCTS INC

NEBRASKA PLASTICS INC

VYTEC CORP

2. Gypsum Board* — Nom 5/8 in. thick gypsum sheathing supplied in min 2 ft wide sheets, installed horizontally. Attached to each wood stud with 2 in. long 6d nails spaced vertically 8 in. OC.

See Gypsum Board (CKNX) category for names of manufacturers.

3. **Batts and Blankets"** — Min. 3 in. thick mineral or glass fiber batts.

See Batts and Blankets (BZJZ) category for names of manufacturers.

3A. **Fiber, Sprayed*** — As an alternate to Batts and Blankets (Item 3) — Spray applied cellulose insulation material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 lb/ft^3.

U S GREENFIBER L L C — Cocoon stabilized cellulose insulation.

4. Gypsum Board* — Nom **5/8** in. thick wallboard, with beveled, square or tapered edges. Wallboard nailed 7 in. O.C. with 6d nails 1-7/8 in. long. When used in widths other than **48** in., wallboard is to be installed horizontally.

See Gypsum Board (CKNX) category for names of manufacturers.

5. **Nailheads** — Covered with joint compound.

6. **Joints** — Covered with paper tape and joint compound.

*Bearing the UL Classification **Mark**

Underwriters Laboratories Ins.

BXUV.L501
Fire Resistance Ratings - ANSI/UL 263

Page Bottom Questions?

[redacted]

Fire Resistance Ratings - ANSUUL 263

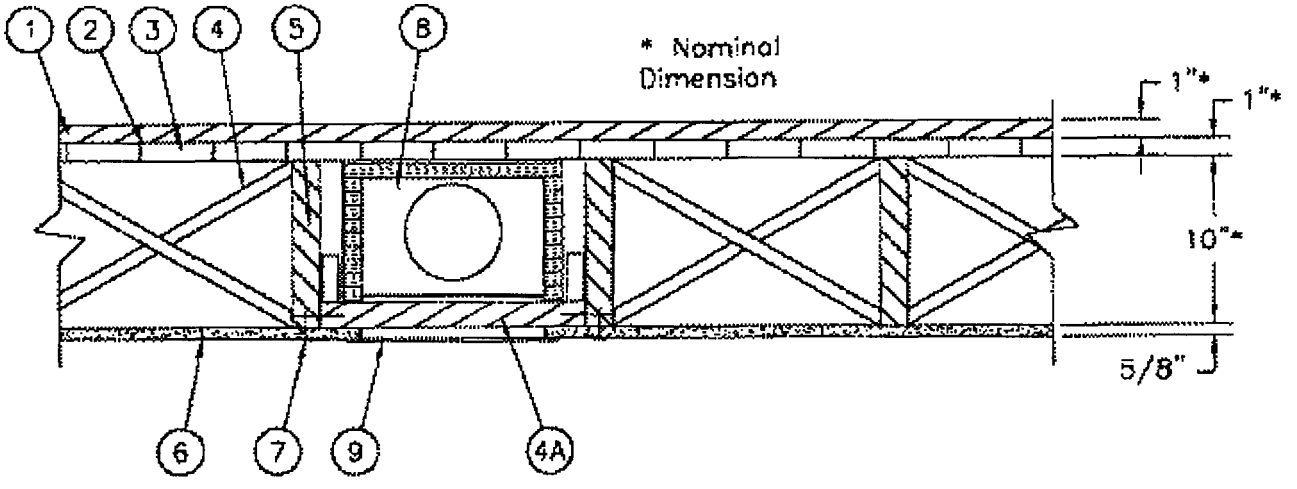
Guide Information

Design No. L501

July 15, **2004**

Unrestrained Assembly Rating — 1 Hr.

Finish Rating — 30 Min.



1, 2, 3.Flooring Systems — The finish flooring (Item 1), vapor barrier (Item 2) and the subflooring (Item 3), may consist of any one of the following systems:

System No. 1

Finish Flooring — 1 by **4** in. T&G, laid perpendicular to joists; or 19/32 in. thick wood structural panels, min grade "Underlayment" or "Single Floor" . Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

Vapor Barrier — Commercial rosin-sized, 0.010 in. thick.

Subflooring — 1 by 6 in. T&G, fastened diagonally to joists; or 15/32 in. thick plywood or 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

System No. 2

Finish Flooring — Floor Topping Mixture* — Compressive strength to be 1500 psi min. Thickness to be 3/4 in. min when used with 19/32 in. thick plywood subflooring or nonveneer APA rated sheathing per APA specifications PRP-108 or 1 in. min when used with 15/32 in. thick plywood subflooring. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Levelrock 2500, Levelrock RH

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

Subflooring — 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

Floor Mat Materials* — (Optional) — Floor mat material nom 0.4 in. thick loose laid over the subfloor. Min floor topping thickness over the floor mat as required for **Floor Topping Mixture*.**

UNITED STATES GYPSUM CO — Type USG Sound Mat

Alternate Floor Mat Materials* — (Optional) - Floor mat material ranging from 3/8 in. to 3/4 in. thick loose laid over the subfloor. Floor topping thickness a min 1 in. over the floor mat.

UNITED STATES GYPSUM CO — Levelrock Brand Sound Reduction Board

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 1/4 in. thick loose laid over the subfloor. Min floor topping thickness over the floor mat as required for **Floor Topping Mixture*.**

UNITED STATES GYPSUM CO — Levelrock Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Min floor topping thickness over the floor mat as required for **Floor Topping Mixture*.**

SOLUTIA INC — Type SC50

System No. 3

Finish Flooring — Floor Topping Mixture* — 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand. Compressive strength to be 1100 psi min. Thickness to be 3/4 in. min.

HACKER INDUSTRIES INC — Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 4010, Firm-Fill High Strength and Gyp-Span Radiant.

Floor Mat Materials* — (Optional) — Floor mat material nom 1/4 in. thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/2 in. of floor-topping mixture.

HACKER INDUSTRIES INC — Type Sound-Mat.

Subflooring — 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

System No. 4

Finish Flooring — Floor Topping Mixture* — Foam concentrate mixed 40: 1 by volume ft with water and expanded at 100 psi through nozzle. Mix at rate of 1.4 cu feet of preformed foam to 94 lbs Type I Portland cement and 300 lbs of sand with 5-1/2 gal of water. Cast density of floor topping mixture 100 plus or minus 5 pcf. Min compressive strength 1000 psi. Thickness 1-1/2 in.

ELASTIZELL CORP OF AMERICA — Type FF.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Subflooring — 15/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

System No. 5

Finish Flooring — Floor Topping Mixture* — Foam concentrate mixed 40: 1 by volume with water and expanded at 100 psi through nozzle. Mix at rate of 1.2 cu ft of preformed foam to 94 lbs Type 1 Portland cement and 300 lbs of sand with 5-1/2 gal of water. Cast density of floor topping mixture is 100 plus or minus 5 pcf. Min compressive strength 1000 psi. Thickness 1-1/2 in.

CELLULAR CONCRETE L L C

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Subflooring — 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

System No. 6

Floor Topping Mixture" — Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mix at rate of 1.4 cu ft of preformed foam to 94 lbs Type I Portland Cement, 62.5 lb of pea gravel and 312.5 lbs of sand, with approx 5.5 gal of water. Cast density of Floor Topping Mixture 100 (+ or -) 5 pcf. Min compressive strength 1000 psi. Thickness 1 in.

LITE-CRETE INC — Type I.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

Subflooring — 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

System No. 7

Finish Flooring — Floor Topping Mixture" — Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mix 94 lbs cement, 300 lbs sand, approx 5.4 gal water, 1.2 cu ft preformed foam, 5 oz Type N fiber and 4 oz Component Z. Cast density of floor topping mixture shall be 105 (+ or -) 5 pcf with min compressive strength of 1200 psi. Min thickness shall be 3/4 in.

ELASTIZELL CORP OF AMERICA — Type ZC.

Subflooring — 15/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

System No. 8

Finish Flooring — Floor Topping Mixture" — 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand. Min compressive strength 1000 psi. Min thickness of 3/4 in. when used with 19/32 in. thick plywood sub-flooring or 1 in. min when used with 15/32 in. thick plywood subflooring .

ULTRA QUIET FLOORS — Types UQF-A, UQF-Super Blend, UQF-Plus 2000.

Sub-flooring — 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

System No. 9

Finish Flooring — Floor Topping Mixture" — 3 to 7 gal of water mixed with 80 lbs of floor topping mixture and 1.0 to 2.1 cu ft of sand. Compressive strength to be 1000 psi min. Thickness to be 3/4 in. min when used with 19/32 in. thick plywood sub-flooring or 1 in. min when used with 15/32 in. thick plywood sub-flooring.

MAXXON C O W — Type D-C, GC, GC2000, L-R, T-F, CT .

Floor Mat Material* — (Optional) — Floor mat material nom 1/4 in. thick adhered to sub-floor with Maxxon Floor Primer. Primer to be applied to the surface of the mat prior to lath placement.

MAXXON CORP — Type Acousti-Mat.

Metal lath — For use with floor mat material, **3/8** in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Floor topping thickness a nom 1 in. over the floor mat.

Alternate Floor Mat Materials* — (Optional) — Floor mat material nom 1/4 in. thick loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. Floor topping thickness a min 1 in. over the floor mat.

MAXXON CORP — Type Acousti-Mat II.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

Sub-flooring — 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

System No. 10

Finish Flooring — Floor Topping Mixture* — 4 to 7 gal of water mixed with 80 lbs of floor topping mixture and 1.4 to 1.9 cu ft of sand. Compressive strength to be 1200 psi min. Thickness to be 3/4 in. min when used with 19/32 in. thick plywood sub-flooring or 1 in. min when used with 15/32 in. thick plywood sub-flooring.

RAPID FLOOR SYSTEMS — Type RF, RFP, RFU, RFR, Ortecrete .

Floor Mat Material* — (Optional) — Floor mat material nom 1/4 in. thick adhered to sub-floor with Maxxon Floor Primer. Primer to be applied to the surface of the mat prior to lath placement.

MAXXON CORP — Type Acousti-Mat.

Metal Lath — For use with floor mat material, 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Floor topping thickness a nom 1 in. over the floor mat.

Alternate Floor Mat Materials* — (Optional) — Floor mat material nom 1/4 in. thick loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. Floor topping thickness a min 1 in. over the floor mat.

MAXXON CORP — Type Acousti-Mat II.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

Sub-flooring — 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

System No. 11

Finish Floor — Mineral and Fiber board", sizes ranging from 3 ft. by 4 ft. to 8 ft. by 12 ft., by min. 1/2 in. thick. All joints to be staggered a min. of 12 in. OC with adjacent sub-floor joints.

HOMASOTE CO — Type 440-32 Mineral and Fiber Board

Sub-flooring — 1 in. by 6 in. T & G fastened diagonally to joists; or 15/32 in. thick plywood or 7/16 in. thick oriented strand board (OSB) wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

System No. 12

Finish Flooring — Floor Topping Mixture* — Compressive strength to be 2100 psi minimum. Thickness to be 1/2 in. minimum when used with 19/32 in. thick wood structural panels; or 3/4 in. when used with 15/32 in. thick wood structural panels. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Levelrock 3500. Levelrock Commercial RH

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

Sub-flooring — 15/32 or 19/32 in. thick wood structural panels min grade "C-D" or "Sheathing". Face grain of plywood to be perpendicular to joists with joints staggered.

Floor Mat Materials* — (Optional) — Floor mat material nom 0.4 in. thick loose laid over the subfloor. Floor topping thickness a min 1 in. over the floor mat.

UNITED STATES GYPSUM CO — Type USG Sound Mat

Alternate Floor Mat Materials* — (Optional) - Floor mat material ranging from 3/8 in. to 3/4 in. thick loose laid over the subfloor. Min floor topping thickness over the floor mat as required for **Floor Topping Mixture*.**

UNITED STATES GYPSUM CO — Levelrock Brand Sound Reduction Board

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 1/4 in. thick loose laid over the subfloor. Min floor topping thickness over the floor mat as required for **Floor Topping Mixture*.**

UNITED STATES GYPSUM CO — Levelrock Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Min floor topping thickness over the floor mat as required for **Floor Topping Mixture*.**

SOLUTIA INC — Type SC50

System No. 13

Finish Flooring — Floor Topping Mixture* — Compressive strength to be 3000 psi minimum. Thickness to be 1/2 in. minimum when used with 19/32 in. thick wood structural panels; or 3/4 in. when used with 15/32 in. thick wood structural panels. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Levelrock 4500

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

Sub-flooring — 15/32 or 19/32 in. thick wood structural panels min grade "C-D" or "Sheathing". Face grain of plywood to be perpendicular to joists with joints staggered.

Floor Mat Materials* — (Optional) — Floor mat material nom 0.4 in. thick loose laid over the subfloor. Floor topping thickness a min 1 in. over the floor mat.

UNITED STATES GYPSUM CO — Type USG Sound Mat

Alternate Floor Mat Materials* — (Optional) - Floor mat material ranging from 3/8 in. to 3/4 in. thick loose laid over the subfloor. Min floor topping thickness over the floor mat as required for **Floor Topping Mixture*.**

UNITED STATES GYPSUM CO — Levelrock Brand Sound Reduction Board

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 1/4 in. thick loose laid over the subfloor. Min floor topping thickness over the floor mat as required for **Floor Topping Mixture*.**

UNITED STATES GYPSUM CO — Levelrock Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Min floor topping thickness over the floor mat as required for **Floor Topping Mixture*.**

SOLUTIA INC — Type SC50

System No. 14

Finish Flooring — Floor Topping Mixture* — Compressive strength to be 3000 psi minimum. Thickness to be 3/4 in. minimum, when used with 19/32 in. thick wood structural panels; or 1 in. when used with 15/32 in. thick wood structural panels. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Levelrock SLC

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

Sub-flooring — 15/32 or 19/32 in. thick wood structural panels min grade "C-D" or "Sheathing". Face grain of plywood to be perpendicular to joists with joints staggered.

Floor Mat Materials* — (Optional) — Floor mat material nom 0.4 in. thick loose laid over the subfloor. Floor topping thickness a min 1 in. over the floor mat.

UNITED STATES GYPSUM CO — Type USG Sound Mat

Alternate Floor Mat Materials" — (Optional) - Floor mat material ranging from 3/8 in. to 3/4 in. thick loose laid over the subfloor. Min floor topping thickness over the floor mat as required for **Floor Topping Mixture*.**

UNITED STATES GYPSUM CO — Levelrock Brand Sound Reduction Board

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 1/4 in. thick loose laid over the subfloor. Min floor topping thickness over the floor mat as required for **Floor Topping Mixture*.**

UNITED STATES GYPSUM CO — Levelrock Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Min floor topping thickness over the floor mat as required for **Floor Topping Mixture*.**

SOLUTIA INC — Type SC50

System No. 15

Finish Flooring — Floor Topping Mixture" — Compressive strength to be 1000 psi min. Thickness to be 3/4 in. min when used with 19/32 in. thick wood structural panels or 1 in. min when used with 15/32 in. thick wood structural panels. Refer to manufacturer's instructions accompanying the material for specific mix design.

ALLIED CUSTOM GYPSUM

PLASTERWORKS L L C — Accu-Crete, Accu-Flow, Accu-Floor, Accu-Radiant

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

Subflooring — 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered.

4. **Cross Bridging** — 1 by 3 in.

4A. **Horizontal Bridging** — Used in lieu of item 4 in same joist bay as item 8 (ceiling damper), when item 8 is employed. Wood 2 by **4** in. secured between joists with nails.

5. Wood Joists — 2 by 10 in., spaced 16 in. OC, firestopped.

6. **Gypsum Board*** — 5/8 in. thick. Sheets of wallboard (or lath) installed with long dimension perpendicular to joists and fastened to each joist with 1-7/8 in. long, 6d cement coated nails spaced 6 in. OC.

AMERICAN GYPSUM CO — Type AG-C, AGX-4, AGX-7, AGX-8, AGX-10, AGX-11, AGX-C.

BEIJING NEW BUILDING MATERIALS CO LTD — Type DBX-1.

BPB AMERICA INC — Types EGRG, FRPC or SF3 or ProRoc Type C, or ProRoc Type X .

BPB CANADA INC — ProRoc Type C, ProRoc Type X, ProRoc Type Abuse-Resistant.

CANADIAN GYPSUM COMPANY — Type C, IP-X1 , IP-X2, IPC-AR, SCX, SHX or WRX.

G-P GYPSUM COW, SUB OF

GEORGIA-PACIFIC CORP — Types 5, 9, C, GPFS1, GPFS6.

LAFARGE NORTH AMERICA INC — Types LGFC3, LGFC6, LGFC6A, LGFC-C, LGFC-C/A.

NATIONAL GYPSUM CO — Type FSK, FSK-C, FSK-G, FSW, FSW-2, FSW-C or FSW-G.

PABCO GYPSUM, DIV OF

PACIFIC COAST BUILDING PRODUCTS INC — Type C, PG-3, PG-4, PG-5, PG-6, PG-9 or PG-C.

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1

STANDARD GYPSUM L L C — Types SGC, SG-C or SGC-G.

TEMPLE-INLAND FOREST PRODUCTS CORP — Types T, VPB-Type T, FRX-6, VPBX-6, FRWRX-6, TG-C or FRX-6 Exterior Gypsum Soffit Board.

UNITED STATES GYPSUM CO — Type C, IP-X1, IP-X2, IPC-AR, SCX, SHX or WRX.

USG MEXICO S A DE C V — Type C, IP-X1, IP-X2, IPC-AR, SCX, SHX or

WRX.

7. Finishing System — Fiber tape embedded in compound over joints and **exposed** nail heads, covered with compound with edges of compound feathered out. **As** an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced.

8. **Ceiling Damper* (Optional) —** Maximum nominal area, 198 sq in. Maximum size not to exceed 12 in. wide by 16-1/2 in. long. Maximum dmaper height 8-3/4 in. Installed in accordance with manufacturer's installation instructions provided with the damper. Maximum damper openings not to exceed 198 **sq.** in. per 100 sq ft of ceiling area.

NCA MFG INC — Models CD-S/R-HC, CD-RD-HC.

NCA MFG LTD — Models CD-S/R-HC, CD-RD-HC.

RUSKIN *CO* — Model CFD7.

9. **Grille —** Steel. Installed in accordance with installation instructions provided with item **8.**

10. **Steel Corner Fasteners —** (Optional-not shown)-Used to attach ends of wallboard at wall intersection where joists run parallel to wall. Channel shaped, **2** in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galvanized steel. Fasteners nailed to face of wall bearing plate through fastener tab with one **No.** 6d cement coated nail, spaced not greater than 16 in. OC and 2 in. from edge of wallboard. Fasteners covered with gypsum wallboard facing applied to intersecting wall.

*Bearing the UL Classification Mark

Page Top **Notice of Disclaimer** **Questions?** [redacted]

UL Listed and Classified Products **UL Recognized Components** **Products Certified for Canada**

Underwriters Laboratories Inc.

BXUV.U305
Fire Resistance Ratings - ANSVUL 263

Page Bottom **Questions?**

[redacted]

Fire Resistance Ratings - ANSVUL 263

Guide Information

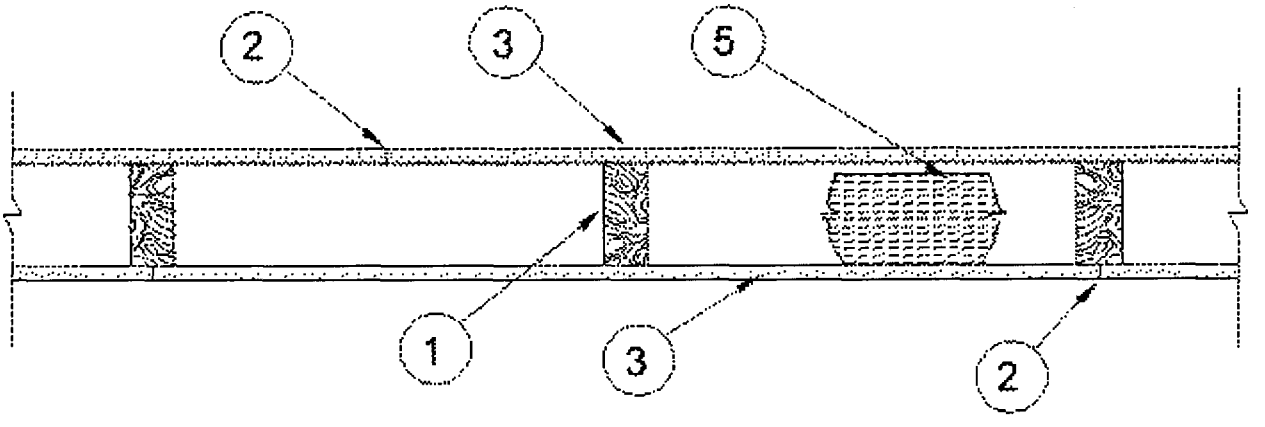
Design No. U305

May 08,2004

Bearing Wall Rating — 1 HR.

Finish Rating — See Item 3.

STC Rating - 56 (See Item 8)



1. **Wood Studs** — Nom 2 by **4** in. spaced 16 in. OC max, effectively firestopped.

2. **Joints and Nailheads** — Exposed or covered with fiber tape and joint compound, except where required for specific edge configuration. For tapered, rounded-edge gypsum board, joints covered with joint compound or fiber tape and joint compound. **As** an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced. Nailheads exposed or covered with joint compound.

3. **Gypsum Board*** — **5/8** in. thick paper or vinyl surfaced, with beveled, square, or

tapered edges, applied either horizontally or vertically. Gypsum boards nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths of other than 48 in., gypsum boards are to be installed horizontally. For an alternate method of attachment of gypsum boards, refer to Item 6, Steel Framing Members*.

When Item 6 , Steel Framing Members*, is used, gypsum board attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

AMERICAN GYPSUM CO — Types AGX-1, AGX-2, AGX-3 (finish rating 23 min.), Type AGX-7, AGX-11 (finish rating 26 min) or Type AG-C, TypeAGX-8 (finish rating 20 rnin), Type AGX-9 (finish rating 20 min), Type AGX-10 (finish rating 20 min), Type AGX-5 (finish rating 26 min), Type AGX-4 (finish rating 20 min), Type AGX-C.

BEIJING NEW BUILDING MATERIALS CO LTD — Type DBX-1 (finish rating 24 min).

BPB AMERICA INC — Type 1, Type SF3 (finish rating 20 min) or FRPC, ProRoc Type C or ProRoc Type X (finish rating 26 min), Type EGRG (finish rating 23 min)

BPB CANADA INC — ProRoc Type C, ProRoc Type X or ProRoc Type Abuse-Resistant (finish rating 26 min)

CANADIAN GYPSUM COMPANY — Type AR (finish rating 26 min), Type C (finish rating 26 min), Type FCV (finish rating 26 min), Type IP-AR (finish rating 26 min), Type IPC-AR (finish rating 26 min), Type IP-X1 (finish rating 26 min), Type IP-X2 (finish rating 26 min), Type SCX (finish rating 26 min), Type SHX (finish rating 26 min), Type WRC (finish rating 26 min), Type WRX (finish rating 26 min) .

G-P GYPSUM CORP, SUB OF

GEORGIA-PACIFIC CORP — Type 5 (finish rating 26 min), Type 6 (finish rating 23 min), Type 9 (finish rating 26 min), Type C (finish rating 26 min), Type DGG (finish rating 20 min), Type GPFS 1 (finish rating 20 min), Type GPFS2 (finish rating 20 min), Type GPFS6 (finish rating 26 min), Type DS, Type DAP, Type DD (finish rating 20 min), DA.

LAFARGE NORTH AMERICA INC — Type LGFC2 (finish rating 20 min), Type LGFC3 (finish rating 20 min), Type LGFC6 (finish rating 26 min), Type LGFC-C (finish rating 20 min), Type LGFC6A (finish rating 34 min), Type LGFC2A, Type LGFC-C/A.

NATIONAL GYPSUM CO — Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-G (finish rating 20 min), Type **FSK-C** (finish rating 20 min), Type FSW-C (finish rating 20 min).

PABCO GYPSUM, DIV OF

PACIFIC COAST BUILDING PRODUCTS INC — Types C, PG-2 (finish rating 20 min), PG-3 (finish rating 20 min), Types PG-3W, PG-5W (finish rating 20 min), Type PG-4 (finish rating 20 min), Type PG-6 (finish rating 23 min), Types PG-3WS, PG-5WS (finish rating 20 min), Types PG-5, PG-9 (finish rating 26 min) or Type PG-C.

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1 (finish rating 26 min)

STANDARD GYPSUM L L C — Type SGC(finish rating 20 min), Type SGC-3 (finish rating 20 min.) Type SG-C or SGC-G(finish rating 20 min).

TEMPLE-INLAND FOREST PRODUCTS CORP — Types T (finish rating 20 min), VPB-Type T (finish rating 20 min), WR-Type T (finish rating 20 min), Type T SHTG (finish rating 20 min), FRX-6, VPBX-6, FRWRX-6, TG-C or FRX-6 Exterior Gypsum Soffit Board.

UNITED STATES GYPSUM CO — Type AR (finish rating 26 min), Type SCX (finish rating 26 min), Type C (finish rating 26 min), Type WRX (finish rating 26 rnin), Type WRC (finish rating 26 min), Type IP-X1 (finish rating 26 min), Type FCV (finish rating 26 min), Type IP-X2 (finish rating 26 min), Type SHX (finish rating 26 min), Type FRX-G (finish rating 29 min), Type IP-AR (finish rating 26 min), Type IPC-AR (finish rating 26 min).

USG MEXICO S A DE C V — Type AR (finish rating 26 min), Type C (finish rating 26 min), Type WRX (finish rating 26 min), Type WRC (finish rating 26 min), Type IP-X1 (finish rating 26 min), Type FCV (finish rating 26 min), Type IP-X2 (finish rating 26 min), Type SHX (finish rating 26 min), SCX (finish rating 26 min), Type IP-AR (finish rating 26 min), Type IPC-AR (finish rating 26 min).

3A. **Gypsum Board* —** (As an alternate to Item 3) **—** Nom 3/4 in. thick, installed as described in Item 3.

CANADIAN GYPSUM COMPANY — Types AR, IP-AR.

UNITED STATES GYPSUM CO — Types AR, IP-AR.

USG MEXICO S A DE C V — Types **AR,** IP-AR.

3B. **Gypsum Board*** — (As an alternate to Items 3 and 3A) — 5/8 in. thick, 4 ft wide, square edge, applied vertically. Gypsum board nailed 8 in. OC with 1-3/4 in. long galvanized roofing nails. Joint covering (Item 2) not required.

CANADIAN GYPSUM COMPANY — Type WSX (finished rating 22 min).

UNITED STATES GYPSUM CO — Type WSX (finished rating 22 min).

USG MEXICO S A DE C V — Type WSX (finished rating 22 min).

3C. **Gypsum Board*** — (As an alternate to Items 3, 3A and 3B) - 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally to one side of the assembly. Secured as described in Item 3. Joint covering (Item 2) not required.

CANADIAN GYPSUM COMPANY — Type SHX.

UNITED STATES GYPSUM CO — Type **SHX.**

USG MEXICO S A DE C V — Type SHX.

3D. **Gypsum Board*** — (As an alternate to Items 3, 3A, 3B and 3C) — 5/8 in. thick, applied vertically and secured as described in Item **3.**

NATIONAL GYPSUM CO — Type FSW-5 (finish rating 22 min).

4. **Steel Corner Fasteners — (Optional) —** For use at wall corners. Channel shaped, **2** in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge (not along tapered edges) of the gypsum board, no greater than 2 in. from corner of gypsum board, max spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. Comers of wall board shall be nailed to top and bottom plate using No. 6d cement coated nails.

5. Batts and Blankets* — (Optional) Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities.

CERTAINTEED CORP

GUARDIAN FIBERGLASS INC

JOHNS MANVILLE INTERNATIONAL INC

KNAUF FIBER GLASS GMBH

OWENS CORNING HT INC, DIV OF

OWENS CORNING — Corning Fiberglas Corp.

ROCK WOOL MANUFACTURING CO — Delta Board.

ROXUL INC

THERMAFIBER L L C — Type SAFB.

5A. **Fiber, Sprayed*** — (Not shown) As an alternate to Batts and Blankets (Item *5)* — Spray applied cellulose insulation material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 lb/ft^3.

U S GREENFIBER L L C — Cocoon stabilized cellulose insulation.

5B. **Fiber, Sprayed*** — (Not shown) As an alternate to Batts and Blankets (Item *5)* and Item SA - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.

NU-WOOL CO INC — Cellulose Insulation

6. **Steel Framing Members (Optional, Not Shown)*** — Furring channels and Steel Framing Members as described below:

a. **Furring Channels** — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. **As** an alternate, ends of adjoining channels may be overlapped 6 in. and secured,together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

b. **Steel Framing Members*** — used to attach furring channels (Item 7a) to studs . Clips spaced 48 in. OC., and secured to studs with No. 8 **x** 2-1/2 in. coarse drywall

screw through the center grommet. Furring channels are friction fitted into clips.

PAC INTERNATIONAL INC — Type RSIC-1.

7. Caulking and Sealants — (not shown, optional) **A** bead of acoustical sealant applied around the partition perimeter for sound control.

8. STC Rating — The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1 through 6, except:

A. Item 1, above - Nailheads Shall be covered with joint compound.

B. Item *2,* above - Joints **As** described, shall be covered with fiber tape and joint compound.

C. Item 5, above - Batts and Blankets* The cavities formed by the studs shall be friction fit with R-19 unfaced fiberglass insulation batts measuring 6-1/4 in. thick and 15-1/4 in. wide.

D. Item 6, above - Steel Framing Members* Shall be used to attach gypsum board to studs on either the acoustical source or receiving side of the wall assembly.

E. Item **7,** above - Caulking and Sealants (not shown) **A** bead of acoustical sealant shall be applied around the partition perimeter for sound control.

F. Steel Corner Fasteners (Item **4)** and Fiber,Sprayed (Item 5A), not evaluated as alternatives for obtaining STC rating.

"Bearing the UL Classification **Mark**

Page Top **Notice of Disclaimer** **Questions?** [redacted]

UL Listed and Classified Products **UL Recognized Components** **Products Certified for Canada**

Underwriters Laboratories Inc.

BXUV.U356
Fire Resistance Ratings - ANSUUL 263

Page Bottom ***Questions?***

[redacted]

Fire Resistance Ratings - ANSI/UL 263

Guide Information

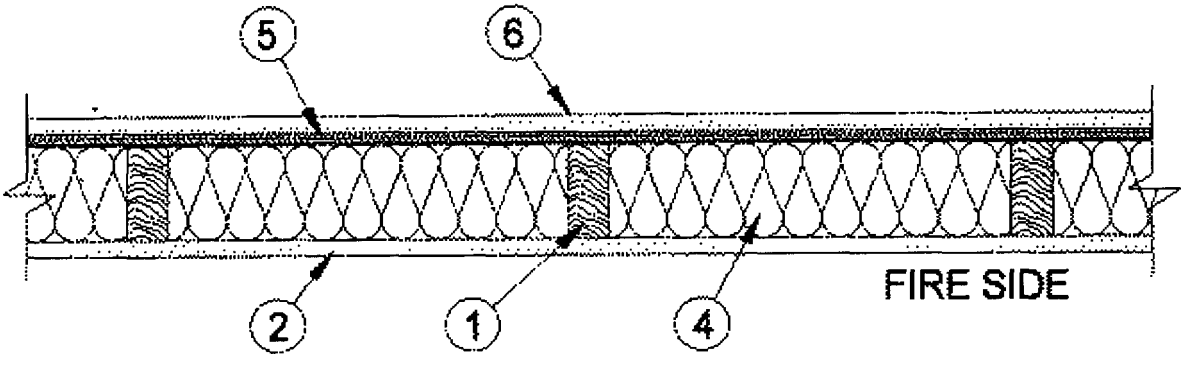
Design No. U356

October 14,2002

(Exposed to Fire on Interior Face Only)

Bearing Wall Rating — 1 Hr

Finish Rating — 23 Min



HORIZONTAL SECTION

1. **Wood Studs** — Nom 2 by 4 in. spaced 16 in. OC with two 2 by 4 in. top and one 2 by **4** in. bottom plates. Studs laterally-braced by wood structural panel sheathing (Item 5) and effectively fire stopped at top and bottom of wall.

2. Gypsum Board* — Any Classified 5/8 in. thick, 4 ft wide, applied vertically and nailed to studs and bearing plates 7 in. OC with 6d cement-coated nails, 1-7/8 in. long with 1/4 in. diam head.

See **Gypsum Board** (CKNX) Category for names of Classified Companies.

3. **Joints and Nailheads** — (Not Shown) — Wallboard joints covered with tape and joint compound. Nail heads covered with joint compound.

4. **Batts and Blankets*** — Mineral fiber or glass fiber insulation, 3-1/2 in. thick, pressure fit to fill wall cavities between studs and plates. Mineral fiber insulation to be unfaced and to have a min density of 3 pcf. Glass fiber insulation to be faced with alumium foil or kraft paper and to have a rnin density of 0.9 pcf (min R-13 thermal insulation rating).

See **Batts and Blankets** (BKNV) Category in the Building Materials Directory and Batts and Blankets (BZJZ) Category in the Fire Resistance Directory for names of Classified Companies.

4A. **Fiber, Sprayed"** — As an alternate to Batts and Blankets (Item 4) — Spray applied cellulose insulation material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 lb/ft^3.

U S GREENFIBER L L C — Cocoon stabilized cellulose insulation.

5. **Wood Structural Panel Sheathing** — Min 7/16 in. thick, **4** ft wide wood structural panels, min grade "C-D" or "Sheathing" . Installed with long dimension of sheet (strength axis) or face grain of plywood parallel with or perpendicular to studs. Vertical joints centered on studs. Horizontal joints backed with nom 2 by **4** in. wood blocking. Attached to studs on exterior side of wall with 6d cement coated box nails spaced 6 in. OC at perimeter of panels and 12 in. OC along interior studs.

6. **Exterior Facings** — Installed in accordance with the manufacturer's installation instructions. One of the following exterior facings is to be applied over the sheathing:

A. **Vinyl Siding — Molded Plastic*** — Contoured rigid vinyl siding having a flame spread value of 20 or less.

See Molded Plastic (BTAT) category in the Building Materials Directory for names of manufacturers.

B. **Particle Board Siding** — Hardboard exterior sidings including patterned panel or lap siding.

C. **Wood Structural Panel or Lap Siding** — APA Rated Siding, Exterior, plywood, OSB or composite panels with veneer faces and structural wood core, per PS 1 or APA Standard PRP-108, including textured, rough sawn, medium density overlay, brushed, grooved and lap siding.

D. **Cementitious Stucco** — Portland cement or synthetic stucco systems with self-furring metal lath or adhesive base coat.

Thickness from 3/8 to **3/4** in., depending on system.

E. Brick Veneer — Any type on nom **4** in. wide brick veneer. When brick veneer is used, the rating is applicable with exposure on either face. Brick veneer fastened with corrugated metal wall ties attached over sheathing to wood studs with 8d nail per tie: ties spaced not more than each sixth course of brick and max **32** in. OC horizontally. One in. air space provided between brick veneer and sheathing.

F. **Exterior Insulation and Finish System (EIFS) —** Nom 1 in. Foamed Plastic* insulation bearing the UL Classification Marking, attached over sheathing and finished with coating system, or Portland cement or synthetic stucco systems, in accordance with manufacturer's instructions. See **Foamed Plastic** (BRYX and CCVW) categories for names of Classified companies.

G. **Siding —** Aluminum or steel siding attached over sheathing to studs.

H. Fiber-Cement Siding — Fiber-cement exterior sidings including smooth and patterned panel or lap siding.

*Bearing the UL Classification Mark

Page Top **Notice of Disclaimer** **Questions?** [redacted]

UL Listed and Classified Products **UL Recognized Components** **Products Certified for Canada**

Underwriters Laboratories Inc.

BXUV.L513
Fire Resistance Ratings - ANSUUL 263

Page Bottom Questions?

[redacted]

Fire Resistance Ratings - ANSUUL 263

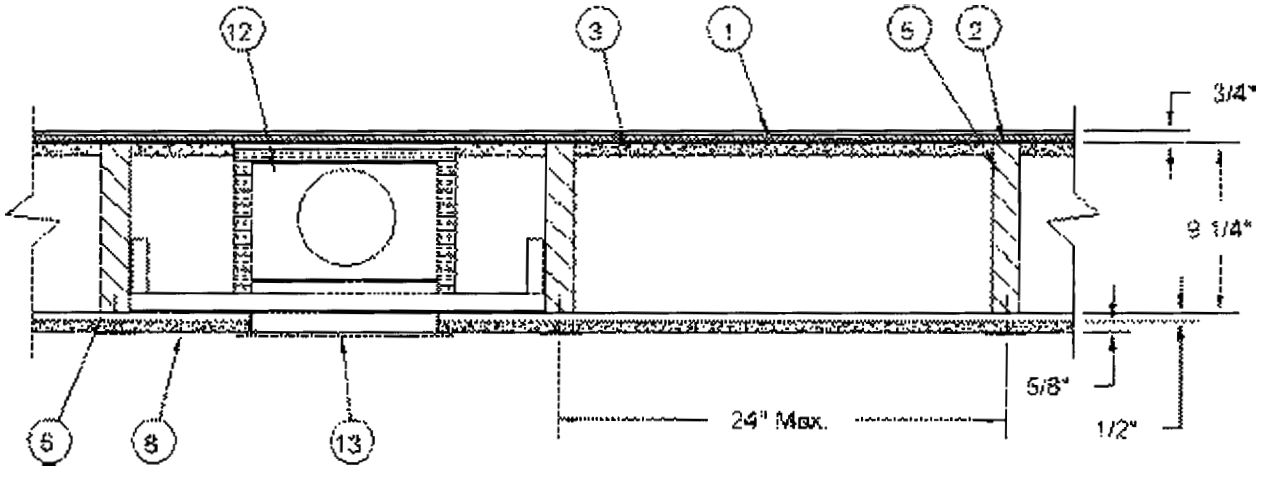
Guide Information

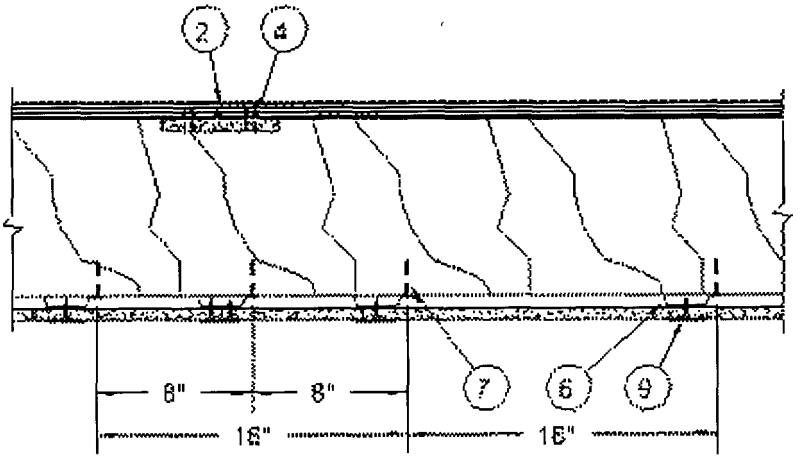
Design No. L513

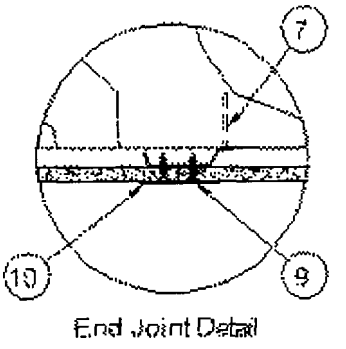
June 02, 2004

Unrestrained Assembly Rating — 1 Hr.

Finish Rating — 28 Min.







End Joint Detail

1. **Flooring** — Nom 3/4 in thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain of plywood or strength axis of panel to be perpendicular to joists with joints staggered.

2. Adhesive — Elastomeric adhesive per American Plywood Association Specification AFG-01 applied in 3/8 in. diam beads to top of joists and 1/4 in. diam beads to T&G panel joints.

3. **Battens** — 6 by 22-1/2 by 5/8 in. thick pieces of gypsum wallboard (Item No. 8) centered under T & G panel joints and fastened with staples (Item No. **4)** spaced 7 in. OC along each edge.

4. **Staples** — Formed of 16 SWG (0.062 in. thick) steel with 1-1/8 in. legs and 1/2 in. crown, driven flush with gypsum wallboard.

4A. **Finish Flooring Systems** — (Not shown, optional) — To be placed over Item 1. Note: When finish flooring systems described below are used, the batten strip and staples (Item Nos. 3 and 4) may be omitted.

System No. 1

Finish Flooring — Floor Topping Mixture" — Compressive strength to be 1000 psi min. Thickness to be 3/4 in. min. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Levelrock 2500, Levelrock RH

Metal Lath — For use with floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material.

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

Floor Mat Materials* — (Optional) — Floor mat material nom 0.4 in. thick loose laid over the subfloor. Floor topping thickness a min 1 in. over the floor mat.

UNITED STATES GYPSUM CO — Type USG Sound Mat

Alternate Floor Mat Materials* — (Optional) - Floor mat material ranging from 3/8 in. to 3/4 in. thick loose laid over the subfloor. Floor topping thickness a min 3/4 in. over the floor mat.

UNITED STATES GYPSUM CO — Levelrock Brand Sound Reduction Board

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 1/4 in. thick loose laid over the subfloor. Floor topping thickness a min 3/4 in. over the floor mat.

UNITED STATES GYPSUM CO — Levelrock Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness a min 3/4 in. over the floor mat.

SOLUTIA INC — Type SC50

System No. 2

Finish Flooring — Floor Topping Mixture* — Foam concentrate mixed 40: 1 by volume with water and expanded at 100 psi through nozzle. Mix at rate of 1.4 cu feet of preformed foam to 94 lbs Type I Portland cement and 300 lbs of sand with 5-1/2 gal of water. Cast density of floor topping mixture 100 plus or minus 5 pcf. Min compressive strength 1000 psi. Thickness 1-1/2 in.

ELASTIZELL CORP OF AMERICA — Type FF.

System No. 3

Finish Flooring — Floor Topping Mixture* — 6.8 gal water to 80 lbs of floor topping mixture to 1.9 cu ft of sand. Compressive strength to be 1100 psi min. Thickness to be 3/4 in. min.

HACKER INDUSTRIES INC — Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant.

Floor Mat Materials* — (Optional) — Floor mat material nom 1/4 in. thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/2 in. of floor-topping mixture.

HACKER INDUSTRIES INC — Type Sound-Mat.

Vapor Barrier — (Optional)— Commercial asphalt saturated felt, 0.030 in thick.

System No. 4

Finish Flooring — Floor Topping Mixture" — Foam concentrate mixed 40: 1 by volume with water and expanded at 100 psi through nozzle. Mix at rate of 1.2 cu ft of preformed foam to 94 lbs Type I Portland cement and 300 lbs of sand with 5-1/2 gal of water, Cast density of floor topping mixture 100 plus or minus 5 pcf. Min compressive strength 1000 psi. Thickness 1-1/2 in.

CELLULAR CONCRETE L L C

Vapor Barrier-(Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

System No. 5

Floor Topping Mixture" — Foam concentrate mixed 40: 1 by volume with water and expanded at 100 psi through a foam nozzle. Mix at rate of 1.4 cu ft of preformed foam to 94 lbs Type I Portland Cement, 62.5 lb of Pea Gravel and 312.5 lbs of sand, with approximately 5.5 gal of water. Cast density of Floor Topping Mixture 100 (+ or -) 5 pcf. Min compressive strength 1000 psi. Thickness 1 in.

LITE-CRETE INC — Type I.

Vapor Barrier-(Optional) — Commercial asphalt saturated felt, 0.030 in. thick.

System No. 6

Finish Flooring — Floor Topping Mixture" — Foam concentrate mixed 40: 1 by volume with water and expanded at 100 psi through **a** nozzle. Mix 94 lbs cement, 300 lbs sand, approximately 5.4 gal water, 1.2 cu ft preformed foam, 5 oz Type N fiber and 4 oz Component Z. Cast density of floor topping mixture shall be 105 (+ or -) 5 pcf with a min compressive strength of 1200 psi. Min thickness shall be 3/4 in.

ELASTIZELL CORP OF AMERICA — Type ZC.

System No. 7

Finish Flooring — Floor Topping Mixture* — 2.95 cu ft of stabilized preformed foam to 94 lb of Portland cement premixed with ***6*** gal of water. Cellular concrete to have a dry density of 31.5 (+ or -) 3.0 pcf and a 28-day compressive strength of 190 to 350 psi, as determined in accordance with ASTM C495-66. Thickness to be 3/4 in. min.

CELLUFOAM CONCRETE SYSTEMS, DIV OF

CELLUFOAM CONCRETE OF — Type Cellufoam.

System No. 8

Finish Flooring — Floor Topping Mixture* — 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand. Min compressive strength 1000 psi. Min thickness of 3/4 in.

ULTRA QUIET FLOORS — Types UQF-A, UQF-Super Blend, UQF-Plus 2000.

System No. 9

Finish Flooring — Floor Topping Mixture* — 3 to **7** gal of water mixed with 80 lbs of floor topping mixture and 1.0 to 2.1 cu ft of sand. Compressive strength to be 1000 psi min. Min thickness to be 3/4 in.

MAXXON CORP — Type D-C, GC, GC2000, L-R, T-F, CT

Floor Mat Material* — (Optional) — Floor mat material nom 1/4 in. thick adhered to sub-floor with Maxxon Floor Primer. Primer to be applied to the surface of the mat prior to lath placement.

MAXXON CORP — Type Acousti-Mat.

Metal lath — For use with floor mat material, 3/8 in. expanded galvanized steel diamond mesh, **3.4** lbs/sq yd placed over the floor mat material. Floor topping thickness a nom **1** in. over the floor mat.

Alternate Floor Mat Materials* — (Optional) **—** Floor mat material nom 1/4 in. thick loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. Floor topping thickness a min 1 in. over the floor mat.

MAXXON CORP — Type Acousti-Mat II

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

System No. 10

Finish Flooring — Floor Topping Mixture* — 4 to **7** gal of water mixed with 80 lbs of floor topping mixture and 1.4 to 1.9 cu ft of sand. Compressive strength to be 1200 psi min. Min thickness to be 3/4 in.

RAPID FLOOR SYSTEMS — Type RF, RFP, RFU, RFR, Ortecrete

Floor Mat Material* — (Optional) — Floor mat material nom 1/4 in. thick adhered to sub-floor with Maxxon Floor Primer. Primer to be applied to the surface of the mat prior to lath placement.

MAXXON CORP — Type Acousti-Mat.

Metal lath — For use with floor mat material, 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Floor topping thickness a nom 1 in. over the floor mat.

Alternate Floor Mat Materials* — (Optional) **—** Floor mat material nom 1/4 in. thick loose laid over the subfloor. Maxxon Floor Primer to be applied to the surface of the mat prior to the floor topping placement. Floor topping thickness a min 1 in. over the floor mat.

MAXXON COW — Type Acousti-Mat II

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

System No. 11

Finish Floor — Mineral and Fiber Board", sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft, by min 1/2 in. thick. All joints to be staggered a min of 12 in. OC with adjacent sub-floor joints.

HOMASOTE CO — Type 440-32 Mineral and Fiber Board

System No. 12

Finish Flooring — Floor Topping Mixture" — Compressive strength to be 2100 psi minimum. Thickness to be 1/2 in. minimum. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Levelrock 3500, Levelrock Commercial RH

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

Floor Mat Materials* — (Optional) **—** Floor mat material nom 0.4 in. thick loose laid over the subfloor. Floor topping thickness a min 1 in. over the floor mat.

UNITED STATES GYPSUM CO — Type USG Sound Mat

Alternate Floor Mat Materials* — (Optional) - Floor mat material ranging from 3/8 in. to 3/4 in. thick loose laid over the subfloor. Floor topping thickness a min 1/2 in.

over the floor mat.

UNITED STATES GYPSUM CO — Levelrock Brand Sound Reduction Board

Alternate Floor Mat Materials" — (Optional) - Floor mat material nom 1/4 in. thick loose laid over the subfloor. Floor topping thickness a min 1/2 in. over the floor mat.

UNITED STATES GYPSUM CO — Levelrock Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom **3/8** in. thick loose laid over the subfloor. Floor topping thickness a min 1/2 in. over the floor mat.

SOLUTIA INC — Type SC50

System No. 13

Finish Flooring — Floor Topping Mixture* — Compressive strength to be 3000 psi minimum. Thickness to be 1/2 in. minimum.

UNITED STATES GYPSUM CO — Levelrock **4500**

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

Floor Mat Materials* — (Optional) — Floor mat material nom 0.4 in. thick loose laid over the subfloor. Floor topping thickness a min 1 in. over the floor mat.

UNITED STATES GYPSUM CO — Type **USG** Sound Mat

Alternate Floor Mat Materials* — (Optional) - Floor mat material ranging from 3/8 in. to **3/4** in. thick loose laid over the subfloor. Floor topping thickness a min 1/2 in. over the floor mat.

UNITED STATES GYPSUM CO — Levelrock Brand Sound Reduction Board

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom **1/4** in. thick loose laid over the subfloor. Floor topping thickness a min 1/2 in. over the floor mat.

UNITED STATES GYPSUM CO — Levelrock Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness a min 1/2 in. over the floor mat.

SOLUTIA INC — Type SC50

System No. 14

Finish Flooring — Floor Topping Mixture" — Compressive strength to be 3000 psi minimum. Thickness to be 3/4 in. minimum. Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Levelrock SLC

Vapor Barrier — (Optional) — Commercial asphalt saturated felt 0.030 in. thick.

Floor Mat Materials* — (Optional) — Floor mat material nom 0.4 in. thick loose laid over the subfloor. Floor topping thickness a min 1 in. over the floor mat.

UNITED STATES GYPSUM CO — Type USG Sound Mat

Alternate Floor Mat Materials* — (Optional) - Floor mat material ranging from 3/8 in. to 3/4 in. thick loose laid over the subfloor. Floor topping thickness a rnin 3/4 in. over the floor mat.

UNITED STATES GYPSUM CO — Levelrock Brand Sound Reduction Board

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 1/4 in. thick loose laid over the subfloor. Floor topping thickness a min 3/4 in. over the floor mat.

UNITED STATES GYPSUM CO — Levelrock Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness a min 3/4 in. over the floor mat.

SOLUTIA INC — Type SC50

System No. 15

Finish Flooring - Floor Topping Mixture" — Compressive strength to be 1000 psi

min. Thickness to be 3/4 in. min. Refer to manufacturer's instructions accompanying the material for specific mix design.

ALLIED CUSTOM GYPSUM

PLASTERWORKS L L C — Accu-Crete, Accu-Flow , Accu-Floor, Accu-Radiant

5. **Wood Joists —** Nominal 2 by 10 in. spaced 24 in. OC, firestopped.

6. **Resilient Channels —** Formed of No. 25 MSG galv steel spaced 16 in. OC perpendicular to joists. Channels butted at splice, centered on joist and fastened to each joist with 6d cement-coated nails. Additional channels to accommodate end joints of gypsum board, spaced 8 in. from other channels with their ends terminating at joists beyond each side of end joints. As an alternate to the resilient furring channels, **Steel Framing Members"** (Item 6A) may be used.

6A. **Steel Framing Members* —** (Not shown) Main runners nom 12 ft long spaced 48 in. OC. Cross tees nom 4 ft long installed perpendicular to main runners and spaced 16 in. OC. Additional cross tees located 8 in. from and on each side of wallboard end joints. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Hanger wires to be located adjacent to main runner/cross tee intersections. Hanger wires wrapped and twist-tied on 16d nails driven into the side of joists at least 5 in. above the joist bottom face.

BPB AMERICA INC — Types PDWH, PDWS

CHICAGO METALLIC CORP — Types 650, 650C, 670, 670C.

6B. **Steel Framing Members* (Not Shown) —** As an alternate to Items 6 and 6A. Main runners nom **12** ft long, spaced 48 in. OC. Ends of main runners at walls to rest on wall angle, without attachment, with 1/2 to 3/4 in. end clearance. Primary cross tees (1-1/2 in. wide across flange) or cross channels, nom 4 ft long, installed perpendicular to main runners and spaced 24 in. OC. Additional primary cross tees or cross channels required at each wallboard end joint and 8 in. from and on each side of wallboard end joint.

ARMSTRONG WORLD INDUSTRIES INC — Type DFR-8000.

6C. **Steel Framing Members* (Not Shown) —** As an alternate to Items 6, 6A and 6B - Main runners, cross tees, cross channels and wall angle as listed below:

a. **Main Runners —** Nom 10 or 12 ft. long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Hanger wires to be located adjacent to main runer/cross tee intersections. Hanger wires wrapped and twist-tied on 16d nails driven in to the side of

joists at least 5 in. above the bottom face.

b. **Cross Tees** — Nom **4** ft. long, 1-1/2 in. wide face, installed perpendicular to the main runners, spaced 16 in. OC. When Batts and Blankets* (Item 11) are used, cross tees spaced 16 in. OC. Additional cross tees or cross channels used at 8 in. from each side of butted wallboard end joints. The cross tees or cross channels may be riveted or screw attached to the wall angle or channel to facilitate the ceiling installation.

c. **Cross Channels** — Nom **4** ft. long, installed perpendicular to main runners, spaced 16 in. OC. When Batts and Blankets* (Item 11) are used, cross channels spaced 16 in. OC.

d. **Wall Angle or Channel** — Painted or galv steel angle with 1 in. legs or channel with 1 in. legs, 1-9/16 in. deep attached to walls at perimeter of ceiling with fasteners 16 in. OC. To support steel framing member ends and for screw-attachment of the gypsum wallboard.

CGC INTERIORS, DIV OF

CGC INC — Type DGL or RX.

USG INTERIORS INC — Type DGL or RX.

6D. **Steel Framing Members (Not Shown)*** — As an alternate to Items 6, 6A, 6B and 6C, furring channels and Steel Framing Members as described below:

a. **Furring Channels** — Formed of No. *25* MSG galv steel. **2-3/8** in. wide by 7/8 in. deep, spaced **24** in. OC perpendicular to joists. Channels secured to joists as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. **18** SWG galv steel wire near each end of overlap.

b. **Steel Framing Members*** — used to attach furring channels (Item a) to joists (Item 5). Clips spaced **48** in. OC., and secured to alternating joists with No. 8 **x** 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the wallboard butt joints, as described in Item 8.

PAC INTERNATIONAL INC — Type RSIC-1.

7. **Nail, Furring Channel** — 6d cement coated cooler nails, 1-7/8 in. long, 0.092 in. diam shank with 1/4 in. diam flat head.

8. **Gypsum Board* — 5/8** in. thick by 4 ft wide. When resilient channels (Item 6) are used, wallboard installed with long dimension perpendicular to resilient channels and edge joints located between wood joists. Fastened to resilient channels with 1 or 1-1/4 in. long wallboard screws spaced 12 in. OC in field and 8 in. OC along end joints. Screws located 3/4 in. from side joints and 1/2 in. from end joints.

When Steel Framing Members* (Item 6A, 6B or 6C) are used, wallboard installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Fastened to cross tees with 1 in. long wallboard screws spaced 12 in. OC in the field and 8 in, OC along end joints. Fastened to main runners with 1 in. long wallboard screws midway between cross tees. Screws along sides and ends of boards spaced 3/8 to 1/2 in. from board edge. End joints of the sheets shall be staggered with spacing between joints on adjacent boards not less than **4** ft OC.

When Steel Framing Members'' (Item 6D) are used, wallboard installed with long dimension perpendicular to furring channels and side joints of sheet located beneath joists. Wallboard screws are driven through channel spaced 12 in. OC in the field. Wallboard butt joints shall be staggered min. 2 ft. within the assembly, and occur between the main furring channels. At the wallboard butt joints, each end of the gypsum board shall be supported by a single length of furring channel equal to the width of the wallboard plus 6 in. on each end. The furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to underside of the joist with one RSIC-1 clip at each end of the channel. Screw spacing along the butt joint to attach the wallboard to the furring channels shall be 8 in. OC.

AMERICAN GYPSUM CO — Types AG-C, AGX-10, AGX-C.

BPB AMERICA INC — - Type FRPC or SF3, or ProRoc Type C.

BPB CANADA INC — ProRoc Type C.

CANADIAN GYPSUM COMPANY — Type C.

G-P GYPSUM CORP, SUB OF

GEORGIA-PACIFIC CORP — Types 5, C.

LAFARGE NORTH AMERICA INC — Types LGFC3, LGFC-C, LGFC-C/A.

NATIONAL GYPSUM CO — Types FSK-C, FSW-C, FSW-G.

PABCO GYPSUM, DIV OF

PACIFIC COAST BUILDING PRODUCTS INC — Type C, PG-3 or PG-C.

STANDARD GYPSUM L L C — Type SG-C.

TEMPLE-INLAND FOREST PRODUCTS CORP — Type T, VPB-Type T or TG-C.

UNITED STATES GYPSUM CO — Type C.

USG MEXICO S A DE C V — Type C.

8A. Gypsum Board* — For use when **Batts and Blankets*** (Item 11) and **Steel Framing Members*** (Item 6C) are used - 5/8 in. thick, 4 ft wide; installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Fastened to cross tees with 1 in. long steel wallboard screws spaced 8 in. OC in the field and 8 in. OC along end joints. Fastened to main runners with 1 in. long wallboard screws spaced midway between cross tees. Screws along sides and ends of boards spaced 3/8 to 1/2 in. from board edge. End joints of the sheets shall be staggered with spacing between joints on adjacent boards not less than 4 ft OC.

CANADIAN GYPSUM COMPANY — Type C.

UNITED STATES GYPSUM CO — Type C.

USG MEXICO S A DE C V — Type C.

9. Screw, Gypsum Board — Case-hardened steel, 1 or 1-1/4 in. long, 0.150 in. diam shank, self-tapping Phillips type bugle head.

10. **Finishing System** — Joint compound applied over all joints and screw heads; paper tape embedded in first layer of joint compound over all joints, second layer of joint compound applied over tape. As an alternate, nominal 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of classified veneer baseboard. Joints reinforced.

11. **Batts and Blankets"** — Optional - Not Shown - When used Ratings are limited to 1 Hr. - For use with Steel Framing Members" (specifically Item 6C) and Gypsum Board* (specifically Item 8A) - Any thickness mineral wool or glass fiber insulation bearing the UL Classification Marking for Surface Burning Characteristics, having a flame spread value of 25 or less and a smoke spread value of 50 or less. Insulation fitted in the concealed space, draped over steel framing members/gypsum wallboard

ceiling membrane.

12. Ceiling Damper* (Optional) — Maximum nominal area, 198 **sq** in. Maximum size not to exceed 12 in. wide by 16-1/2 in. long. Maximum dmaper height **8-3/4** in. Installed in accordance with manufacturer's installation instructions provided with the damper. Maximum damper openings not to exceed 198 sq. in. per 100 **sq** ft of ceiling area.

RUSKIN CO — Model CFD7.

13. **Grille** — Steel. Installed in accordance with installation instructions provided with item 12.

"Bearing the UL Classification Mark

Page Top **Notice of Disclaimer** **Questions?** [redacted]

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