

PERMIT
 CITY OF NAPOLEON, OHIO - BUILDING DEPARTMENT
 255 West Riverview Avenue, Napoleon, Ohio 43545 - (419) 592-4010

Permit No. 3805 Issued 02/26/96
 Job Location 1159 Indiana ~~XXXX~~ Ave.
 Lot _____
 Issued by Brent N. Damman
 Owner Eldor Von Deylen 592-7115
 Address 1159 Indiana Ave.
 Agent Sash & ~~XXXX~~ Storm, Inc. 225-3308
 Address 2121 Elida Road Lima, OH 45805
 Use Type - Residential X
 Other - Describe _____
 No. Dwelling Units _____
 New Replacement
 Add'n. X Alter _____ Remodel _____
ixed Occupancy _____
 Change of Occupancy _____
 Estimated Cost \$ 7267.00

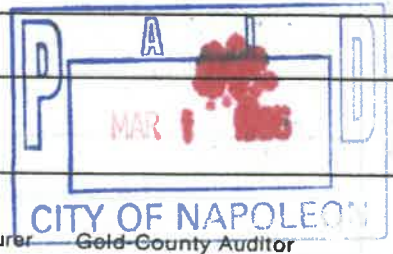
FEES	BASE	PLUS	TOTAL
<input checked="" type="checkbox"/> Building	\$ 9.00	\$ 42.00	\$ 51.00
<input type="checkbox"/> Electrical	\$	\$	\$
<input type="checkbox"/> Plumbing	\$	\$	\$
<input type="checkbox"/> Mechanical	\$	\$	\$
<input type="checkbox"/> Demolition	\$	\$	\$
<input type="checkbox"/> Zoning	\$	\$	\$
<input type="checkbox"/> Sign	\$	\$	\$
<input type="checkbox"/> Water Tap	\$	\$	\$
<input type="checkbox"/> Sew. Insp.	\$	\$	\$
<input type="checkbox"/> Sewer Tap	\$	\$	\$
<input type="checkbox"/> Temp. Water	\$	\$	\$
<input type="checkbox"/> Temp. Elec.	\$	\$	\$
TOTAL FEES.....			\$ 51.00
LESS FEES PAID.....			\$ 51.00
BALANCE DUE.....			\$ -0-

ZONING INFORMATION

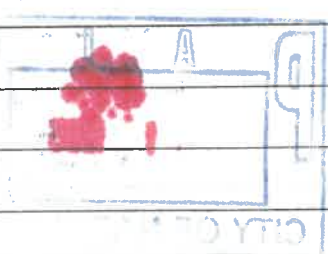
district	lot dimensions		area	front yd	side yd	rear yd
max hgt	no pkg spaces	no ldg spaces	max cover	petition or appeal req'd		date appr

WORK INFORMATION

Size: Length 10.5 Width 15 Stories 1 Ground Floor Area 157.5
 Height 8' Building Volume (for Demo. Permit) _____
 Electrical: _____
 Plumbing: _____
 Mechanical: _____
 Additional Information: Patio Enclosure
 Date _____ Applicant Signature _____



INSPECTION RECORD

UNDERGROUND			ROUGH-IN						FINAL		
Type	Date	By	Type	Date	By	Type	Date	By	Type	Date	By
PLUMBING	Building Drains		Drainage, Waste & Vent Piping			Indirect Waste			Drainage, Waste & Vent Piping		
	Water Piping								Backflow Prevention		
	Building Sewer		Water Piping			Condensate Lines			Water Heater		
	Sewer Connection								FINAL APPROVAL		
MECHANICAL	Refrigerant Piping		Refrigerant Piping			Chimney(s)			Grease Exhaust System		
			Duct Furnace(s)			Fire Dampers			Air Cond. Unit(s)		
	Ducts/ Plenums		Ducts/ Plenums			<input type="checkbox"/> Radiant Htr(s) <input type="checkbox"/> Unit Htr(s)			Refrigeration Equipment		
			Duct Insulation			Pool Heater			Furnace(s)		
			Combustion Products Vents			Ventilation <input type="checkbox"/> Supply <input type="checkbox"/> Exhst.			FINAL APPROVAL		
ELECTRICAL	Conduits & or Cable		Conduits/ Cable			<input type="checkbox"/> Range <input type="checkbox"/> Dryer			Temp Service Temp Lighting		
	Grounding & or Bonding		Rough Wiring			<input type="checkbox"/> Generator(s) <input type="checkbox"/> Motors			Fixtures Lampholders		
	Floor Ducts Raceways		Service Panel Switchboard			<input type="checkbox"/> Water Htr <input type="checkbox"/> Welder			Signs		
	Service Conduit		Busways Ducts			<input type="checkbox"/> Heaters <input type="checkbox"/> Heat Cable			Electric Mtr. Clearance		
	Temporary Power Pole		Subpanels			<input type="checkbox"/> Duct Htr(s) <input type="checkbox"/> Furnace(s)			FINAL APPROVAL		
BUILDING	Location, Set-backs, Esmt(s)		Exterior Wall Construction			Roof Covering Roof Drainage			Smoke Detector		
	Excavation					Exterior Lath			Demolition (sewer cap)		
	Footings & Reinforcing					<input type="checkbox"/> Interior Lath <input type="checkbox"/> Wallboard					
	Floor Slab		Interior Wall Construction			Fire Wall(s)			Building or Structure		
	Foundation Walls		Columns & Supports			Fireplace Chimney					
	Sub-soil Drain		Crawl Space <input type="checkbox"/> Vent <input type="checkbox"/> Access			Attic <input type="checkbox"/> Vent <input type="checkbox"/> Access					
	Piles		Floor System(s)						FINAL APPROVAL BLDG. DEPT.		
			Roof System			Special Insp Reports Rec'd			Certificate of Occupancy Issued		
ADDITIONAL	INSPECTIONS, CORRECTIONS, ETC.					INSPECTIONS, CORRECTIONS, ETC.					
											

APPLICATION FOR

Residential, Building, Electrical, Plumbing, Mechanical, and Demolition Permit

FROM - The City of Napoleon, Ohio, Building Department

255 West Riverview Avenue; P.O. Box 151; Napoleon, Ohio 43545 - Telephone (419) 592-4010

ENTRY NO. _____

PERMIT NO. 3803 ISSUED 2-26-96

JOB LOCATION 1159 Indiana Avenue

LOT _____
(Subdivision or Legal Description)

ISSUED BY BAD
(Building Official)

OWNER Eldor Von Deylen PHONE 592-7115

ADDRESS 1159 Indiana Avenue

AGENT Sash + Storm, Inc. PHONE 225-3308

ADDRESS 2121 Elide Rd, Lima, OH 45805

USE: Residential Commercial Industrial
 Other _____

WORK: New Addition Replacement Remodel

ESTIMATED COST = \$ 7262

ZONING INFORMATION

District	Lot Dimensions	Area	Front Yard	Side Yard	Rear Yard

Max Height	No. Pkg. Spaces	No. Ldg. Spaces	Max Cover	Petition or Appeal Required-Date

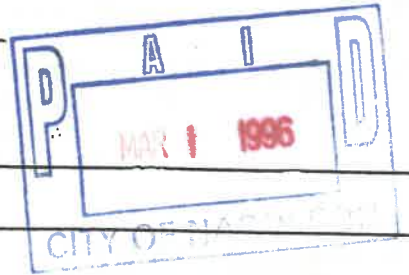
WORK INFORMATION

Building: Ground Floor Area 157.5 sq. ft. Basement Floor Area _____ sq. ft.
 Garage Floor Area _____ sq. ft. 2nd Floor Area _____ sq. ft. Other _____ sq. ft.
 Size: Length 10.5 Width 15 Stories 1 Height 8'
 Building Volume (for Demolition Permit) _____ cubic feet
 Description of Work: Patio Enclosure

	Base	Plus	Total
<input checked="" type="checkbox"/> Building	\$ <u>9-</u>	\$ 12.00	\$ <u>51.00</u>
<input type="checkbox"/> Electrical	\$ _____	\$ _____	\$ _____
<input type="checkbox"/> Plumbing	\$ _____	\$ _____	\$ _____
<input type="checkbox"/> Mechanical	\$ _____	\$ _____	\$ _____
<input type="checkbox"/> Demolition	\$ _____	\$ _____	\$ _____
<input type="checkbox"/> Zoning	\$ _____	\$ _____	\$ _____
<input type="checkbox"/> Sign	\$ _____	\$ _____	\$ _____
<input type="checkbox"/> Water Tap	\$ _____	\$ _____	\$ _____
<input type="checkbox"/> Sewer Tap	\$ _____	\$ _____	\$ _____
<input type="checkbox"/> Temp Water	\$ _____	\$ _____	\$ _____
<input type="checkbox"/> Temp Elec.	\$ _____	\$ _____	\$ _____

Additional Structure _____ Hours _____
 Plan Review: Electric _____ Hours _____

TOTAL FEES \$ 51.00
 Less Fees Paid \$ _____
 BALANCE DUE \$ 72



ELECTRICAL: Contractor _____ Phone _____
Address _____ ESTIMATED COST = \$ _____

Type of Work: () New () Service Change () Rewiring () Add'l Wiring TEMPORARY ELEC. REQUIRED - () Yes () No
Size of Service _____ Underground _____ Overhead _____ Number of New Circuits _____

Description of Work: _____

PLUMBING: Contractor _____ Phone _____
Address _____ ESTIMATED COST = \$ _____

WATER TAP REQUIRED - () Yes () No Size _____ Type of Pipe _____ Water Dist. Pipe _____

SANITARY SEWER TAP REQUIRED - () Yes () No Size _____ Type of Pipe _____ Dr. Waste Vt. Pipe _____

STREET SEWER TAP REQUIRED - () Yes () No Type of Pipe _____ STREET TO BE OPENED - () Yes () No

Main Building Drain Size = _____ Main Vent Pipe Size = _____

LIST NUMBER OF PLUMBING FIXTURES BELOW:
Water Closets = _____ Bathtubs = _____ Showers = _____ Lavatories = _____ Kitchen Sinks = _____ Disposal = _____
Clothes Washer = _____ Floor Drains = _____ Dishwasher = _____ Other _____ Total = _____

Description of Work: _____

MECHANICAL: Contractor _____ Phone _____
Address _____ ESTIMATED COST = \$ _____

HEATING SYSTEM - () Forced Air () Gravity () Hot Water () Steam () Unit Heaters () Radiant () Baseboard

TYPE OF FUEL - () Electric () Natural Gas () Propane () Wood () Coal () Solar () Geothermal Other _____

NUMBER OF HEAT ZONES = _____ HOT WATER - () One (1) Pipe () Two (2) Pipes () Series Loop

ELECTRIC HEAT - Number of Circuits _____ Number of Furnaces _____ Number of Hot Air Runs _____

Number of Hot Water Radiators _____ Total Heat Loss _____ Rated Capacity of Furnace/Boiler _____

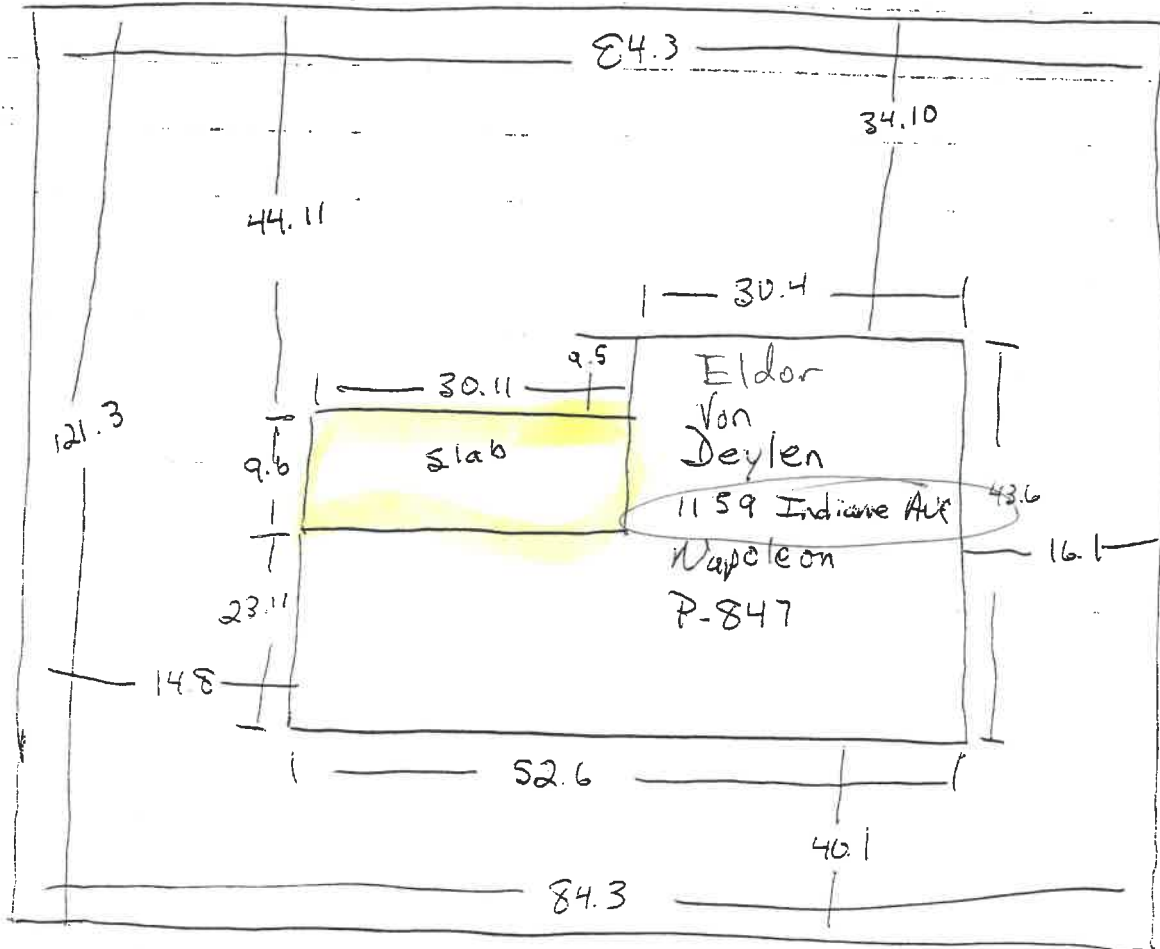
LOCATION OF HEATING UNITS - () Crawl Space () Floor Level () Attic () Suspended () Roof () Outside

Description of Work: _____

DRAWINGS REQUIRED: All applications must be accompanied by two (2) complete sets of Drawings including Site Plans, Foundation Plans, Floor Plans, Structural Framing Plans, Exterior Elevations, Section and Details, Stair Details, Electrical Layout, Plumbing Isometric, Heating Layout, etc. All Plans shall be drawn to scale, show all existing structure on the site Plans, and show electric panel and furnace locations.

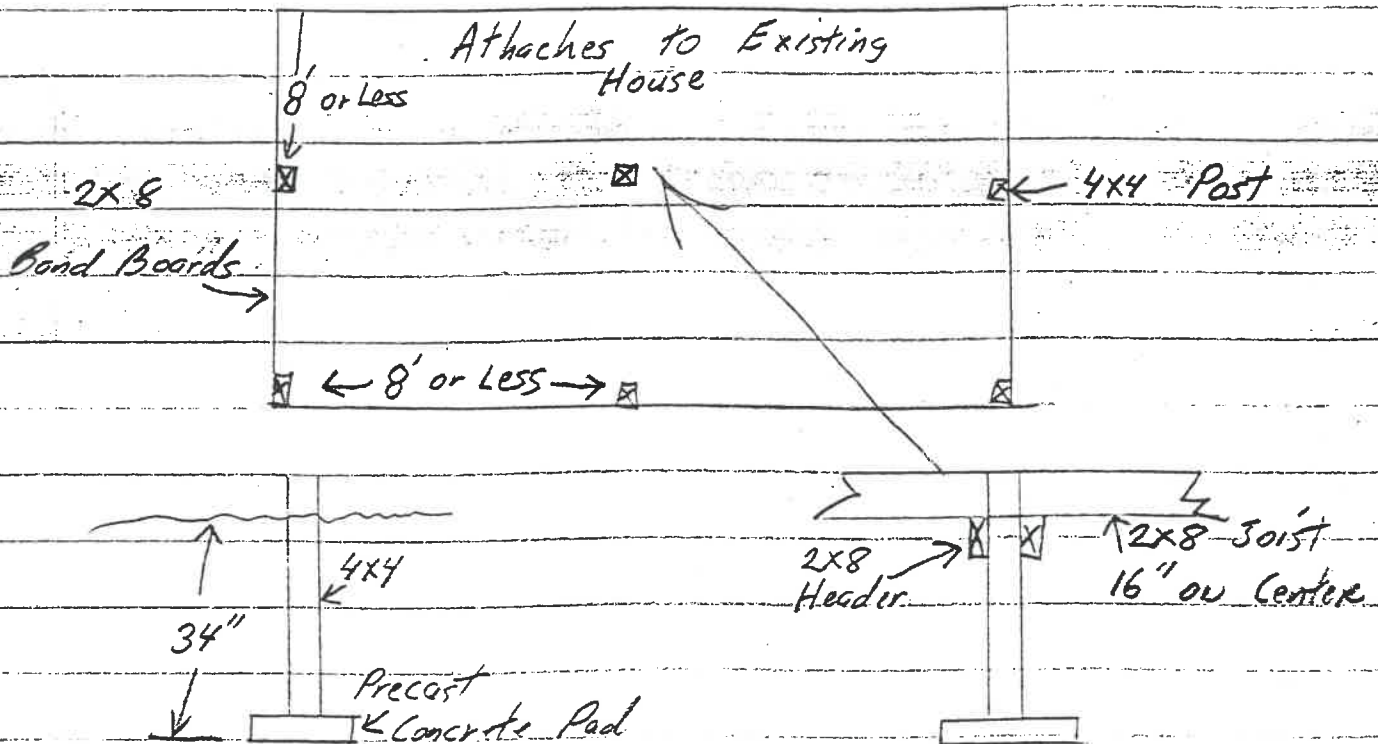
READ AND SIGN BELOW: The undersigned hereby makes application for a Permit for all work described herein and agrees to complete the work in strict accordance with all applicable provisions of the current edition of the C.A.B.O. Building Code, the Napoleon Building and Zoning Codes, the Napoleon Engineering Department Rules and Regulations, Standard Specifications and other pertinent sections of the Napoleon Code of Ordinances.

Signature of Applicant Marie A. Burgei Date 2-22-96



Indiana Ave

Not to Scale



4x4 Post 34" Below Grade Sitting on Precast Concrete Pads

2x8 Joist 16" on Center

2x8 Headers and Bond Boards

3/4" T+E Structure Wood Sub Floor

ALL Lumber Treated with a .40 Saturation Level Except the Sub Floor.

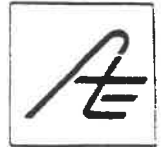
AMBRIC ENGINEERING, INC.

3502 SCOTTS LANE, PHILADELPHIA, PA 19129 ■ PHONE 215 438-2689
FAX 215 438-7110

- Consulting Engineers
- Surveyors
- Inspectors

CERTIFICATION BY PROFESSIONAL ENGINEER

Betterliving Patio Rooms
PanelCraft Honeycomb Building Panels



To Whom It May Concern:

The engineering tests and design data included in this brochure have been reviewed and approved by a professional engineer registered in the State of OHIO

The structural tests and design data described herein were performed in our laboratories under the direct supervision of professional engineers. Affixed is the official engineering stamp and authorized signature:

4-27-94

A handwritten signature in cursive script, likely belonging to the professional engineer mentioned in the text.

Please contact us if you have any questions about the engineering data contained in this brochure.

AMBRIC ENGINEERING, INC.

3502 SCOTTS LANE, PHILADELPHIA, PA 19129 ■ PHONE 215 438-2689
FAX 215 438-7110

- Consulting Engineers
- Surveyors
- Inspectors

April 27, 1994



Ambric Engineering performed a series of structural tests and evaluations on two types of composite panels manufactured by a Philadelphia based company called Craft-Bilt. The first type of panel had a polystyrene core with aluminum sheeting adhered to each of the core faces. The second type of panel had a honey-comb core with aluminum sheeting again, on each of the faces. All tests were performed in strict accordance with the relevant A.S.T.M. procedures and were conducted under the direct supervision of a Professional Engineer. The results of these tests are enclosed and comprise:

- Conformance Specifications for Honeycomb Roof Panels
- Conformance Specifications for Polystyrene Roof Panels
- Conformance Specifications for Honeycomb Wall Panels
- Attachment Details

Our client proposes to market the panel systems in various states throughout the USA. Conformance specifications and attachment details will require Professional Engineering Seals for each state involved. Please study and review the enclosed documents so that Engineering approval will be granted in each state where the product will be sold.

Yours sincerely,

A handwritten signature in cursive script, appearing to read 'Donald D. Meisel'.

Donald D. Meisel
President

CONFORMANCE SPECIFICATIONS

(HONEYCOMB WALL ASSEMBLIES)

TRANSVERSE LOAD (WALL LOADING DATA) : TEST TO A.S.T.M. E72-80 ON 3" THICK PANELS; UNIFORM LOADING USING AIR-BAG.

WALL SPAN (FT.)	6	6
TYPE OF WALL ASSEMBLY	SOLID (NO OPENINGS) (PSF)	FRAMED (DOORS/WINDOWS) (PSF)
MAXIMUM WALL LOAD	100	100
WALL LOAD AT DEFLECTION = (SPAN/180)	100+	86
WALL LOAD USED IN 24 HR LOAD/DEFN. TEST	80	80
ALLOWABLE WALL LOAD *	40	40

* FOUNDED ON THE LESSER OF a) THE MAXIMUM WALL LOAD WITH A SAFETY FACTOR OF 2.5 OR b) THE WALL LOAD AT DEFLECTION = (SPAN/180) OR c) THE WALL LOAD USED IN THE 24 HOUR LOAD / DEFLECTION RECOVERY TEST.

24 HOUR LOAD / DEFLECTION RECOVERY (WALL LOADING DATA) : TEST TO B.O.C.A. NATIONAL BUILDING CODE (1988 SUPPLEMENT), SECTION 1305.0 ON 3" THICK ASSEMBLIES; UNIFORM LOADING USING AIR BAG.

WALL SPAN (FT.)	6	6
	IMMED. RECOV.	RECOV. AFTER 24HR
SOLID WALL ASSEMBLY (12'7"x7'1"x3")	84.82%	92.55%
FRAMED WALL ASSEMBLY (12'5"x6'6"x3")	87.24%	92.76%

AXIAL COMPRESSIVE LOAD (WALL LOADING DATA) : TEST TO A.S.T.M. E72-80 ON 3" THICK PANELS.

TYPE OF WALL ASSEMBLY	SOLID (NO OPENINGS) (LBS)		FRAMED (DOORS/WINDOWS) (LBS)	
	(LBS)	(LBS/FT)	(LBS)	(LBS/FT)
ULTIMATE AXIAL COMPRESSIVE LOAD	29400	2336	45445	3660
ALLOWABLE AXIAL WALL LOAD ***	11760	935	18178	1464

** FOUNDED ON THE ULTIMATE AXIAL COMPRESSIVE LOAD WITH A FACTOR OF SAFETY OF 2.5

RACKING LOAD (WALL RACKING LOAD DATA) : TEST TO A.S.T.M. E72-80 ON 3" PANELS

TYPE OF WALL ASSEMBLY	SOLID (NO OPENINGS) (LBS)		FRAMED (DOORS/WINDOWS) (LBS)	
	(LBS)	(LBS/FT)	(LBS)	(LBS/FT)
ULTIMATE RACKING LOAD * *	2130	170	2360	190
ALLOWABLE AXIAL WALL **	852	68	944	76

* * NO CLEAR POINT OF FAILURE, RATHER, PROGRESSIVE DETERIORATION AT PANEL CORNERS AND EDGES DUE TO INDIVIDUAL ROTATION OF PANELS WITH RESPECT TO THEIR CENTERS.

** FOUNDED ON THE ULTIMATE RACKING LOAD WITH A FACTOR OF SAFETY OF 2.5

APR 27 1991

CONFORMANCE SPECIFICATIONS

(HONEYCOMB ROOF PANELS)

GENERAL : CONSTRUCTION DETAILS AND CONFORMANCE SPECIFICATIONS THAT WERE SUBMITTED IN BUILDING OFFICIALS AND CODE ADMINISTRATORS RESEARCH REPORT 85-46 (REVISED TO 82-66) TO BUILDING OFFICIALS AND CODE ADMINISTRATORS INTERNATIONAL INC., 4051 WEST FLOSSMOOR ROAD, COUNTRY CLUB HILLS, ILLINOIS, 60477-5795.

PHYSICAL PROPERTIES OF HONEYCOMB PANELING AND ATTACHING EXTRUSIONS :

FACING - A.S.T.M. 3004 H154 ALLUMINUM ALLOY; SIZE 0.024"x37.1875"; YIELD STRENGTH 33,400 P.S.I.;
 ULTIMATE STRENGTH 34,600 P.S.I.; ELONGATION 1% TO 3.1%.

CORE - 99LB. KRAFT PAPER; 3/4" CELL SIZE; 11% RESIN IMPREGNATION; DENSITY 1.86 LBS/CU FT.;
 CRUSHING STRENGTH 85 P.S.I.; STRONG PLANE SHEAR 42 P.S.I.; WEAK PLANE SHEAR 23 P.S.I.

FACING AND CORE ADHESIVE - A CONTACT ADHESIVE COMPOSED OF SYNTHETIC RUBBER RESINS AND SOLVENTS THAT MEETS THE DURABILITY AND STRENGTH CRITERIA OF A.S.T.M. C-297, A.S.T.M. D-1780 (MODIFIED), A.S.T.M. D-2918 (MODIFIED).

ATTACHING EXTRUSIONS - A.S.T.M. 5063 T-5 ALLUMINUM ALLOY TENSILE 22,000 P.S.I.; ELONGATION 8%.

TRANSVERSE LOAD (ROOF LOADING DATA) : TEST TO A.S.T.M. E72-80 ON 3" THICK PANELS; TWO POINT LOADING AT QUARTER SPAN

ROOF SPAN (FT.)	10		12		14	
ROOF PANELS WITH NO H-STIFFENERS	LBS	PSF	LBS	PSF	LBS	PSF
ULTIMATE ROOF LOAD	4013.7	147.2	3907.2	119.4	3544.2	92.8
ROOF PANELS WITH H-STIFFENERS	LBS	PSF	LBS	PSF	LBS	PSF
ULTIMATE ROOF LOAD	-	-	2910.0	88.9	3003.3	78.7

APR 27 1994

CONFORMANCE SPECIFICATIONS

(POLYSTYRENE ROOF PANELS)

GENERAL : CONSTRUCTION DETAILS AND CONFORMANCE SPECIFICATIONS THAT WERE SUBMITTED IN BUILDING OFFICIALS AND CODE ADMINISTRATORS RESEARCH REPORT 85-46 (REVISED TO 82-66) TO BUILDING OFFICIALS AND CODE ADMINISTRATORS INTERNATIONAL, INC., INC., 4051 WEST FLOSSMOOR ROAD, COUNTRY CLUB HILLS, ILLINOIS, 60477-5795.

PHYSICAL PROPERTIES OF POLYSTYRENE PANELING AND ATTACHING EXTRUSIONS :

FACING - A.S.T.M. 3004 H154 ALLUMINUM ALLOY; SIZE 0.024"x37.1875"; YIELD STRENGTH 33,400 P.S.I.;
ULTIMATE STRENGTH 34,600 P.S.I.; ELONGATION 1% TO 3.1%.

CORE - ICA-LITE BRAND EXPANDED POLYSTYRENE; RIGID CLOSED CELL; SIZE 2 15/16"x35 3/8"; FT.;
COMPRESSIVE STRENGTH (10% DEFORMATION) 15-21 P.S.I.; FLEXURAL STRENGTH 40-50 P.S.I.; TENSILE STRENGTH 18-22 P.S.I.;
SHEAR STRENGTH 26-32 P.S.I.; SHEAR MODULUS 460-500 P.S.I.; ELASTIC MODULUS 320-360 P.S.I.

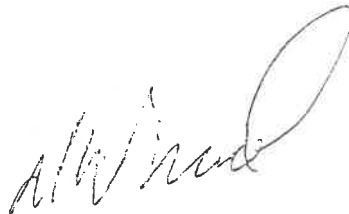
FACING AND CORE ADHESIVE - A CONTACT ADHESIVE COMPOSED OF SYNTHETIC RUBBER RESINS AND SOLVENTS THAT MEETS THE DURABILITY AND STRENGTH CRITERIA OF A.S.T.M. C-297, A.S.T.M. D-1780 (MODIFIED), A.S.T.M. D-2918 (MODIFIED).

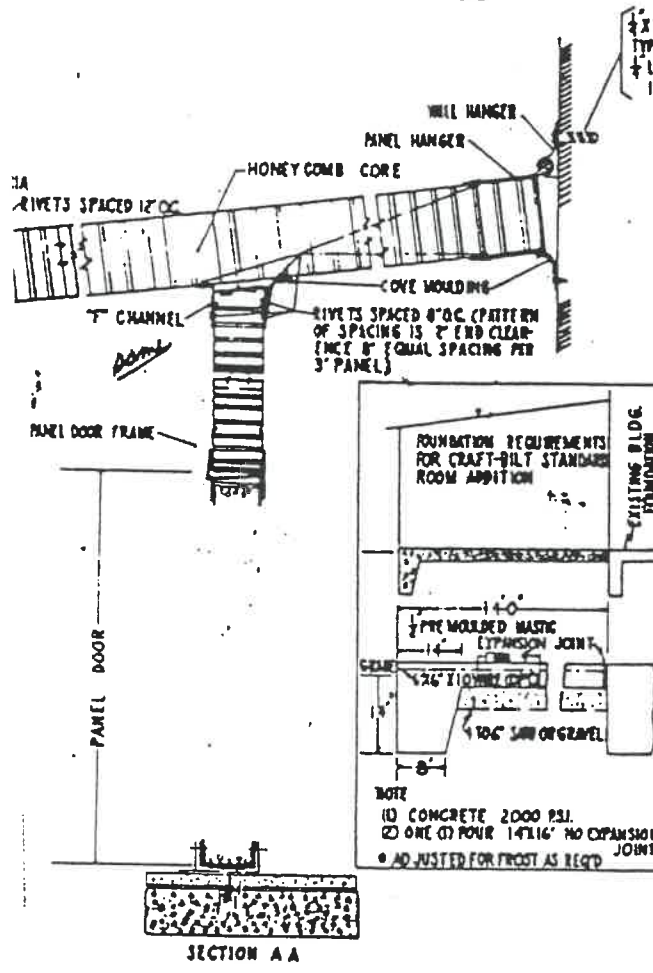
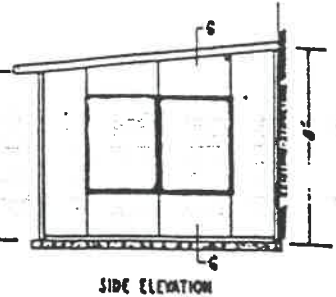
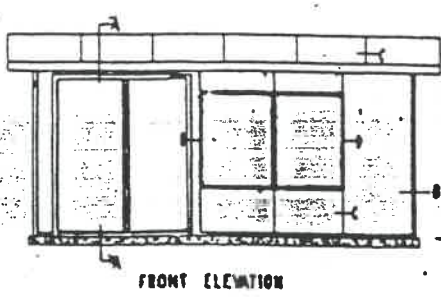
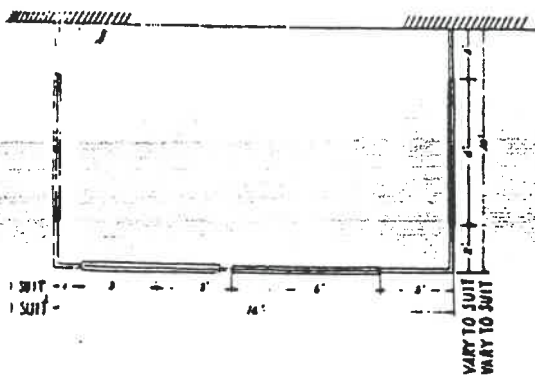
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TRANSVERSE LOAD (ROOF LOADING DATA) : TEST TO A.S.T.M. E72-80 ON 3" THICK PANELS; TWO POINT LOADING AT QUARTER SPAN

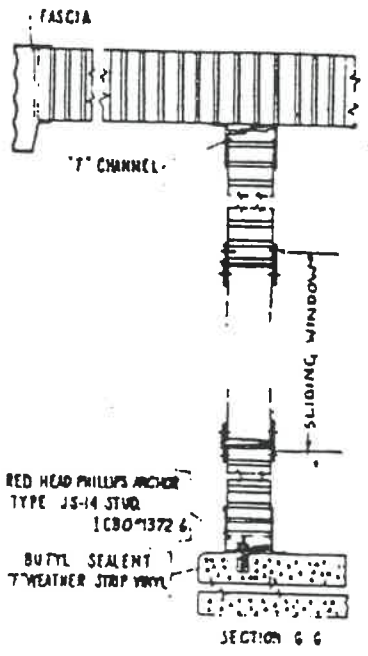
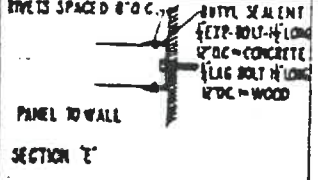
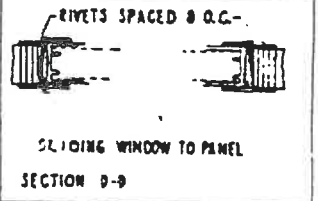
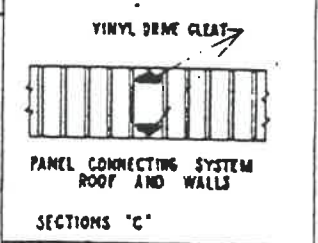
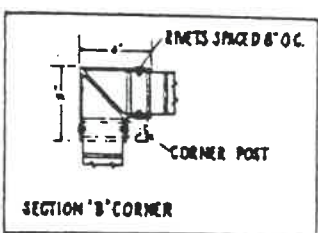
ROOF SPAN (FT.)	10		12		14	
ROOF PANELS WITH H-STIFFENERS	LBS	PSF	LBS	PSF	LBS	PSF
ULTIMATE ROOF LOAD	4158.0	152.5	3389.1	103.6	2123.3	55.6

APR 27 1994





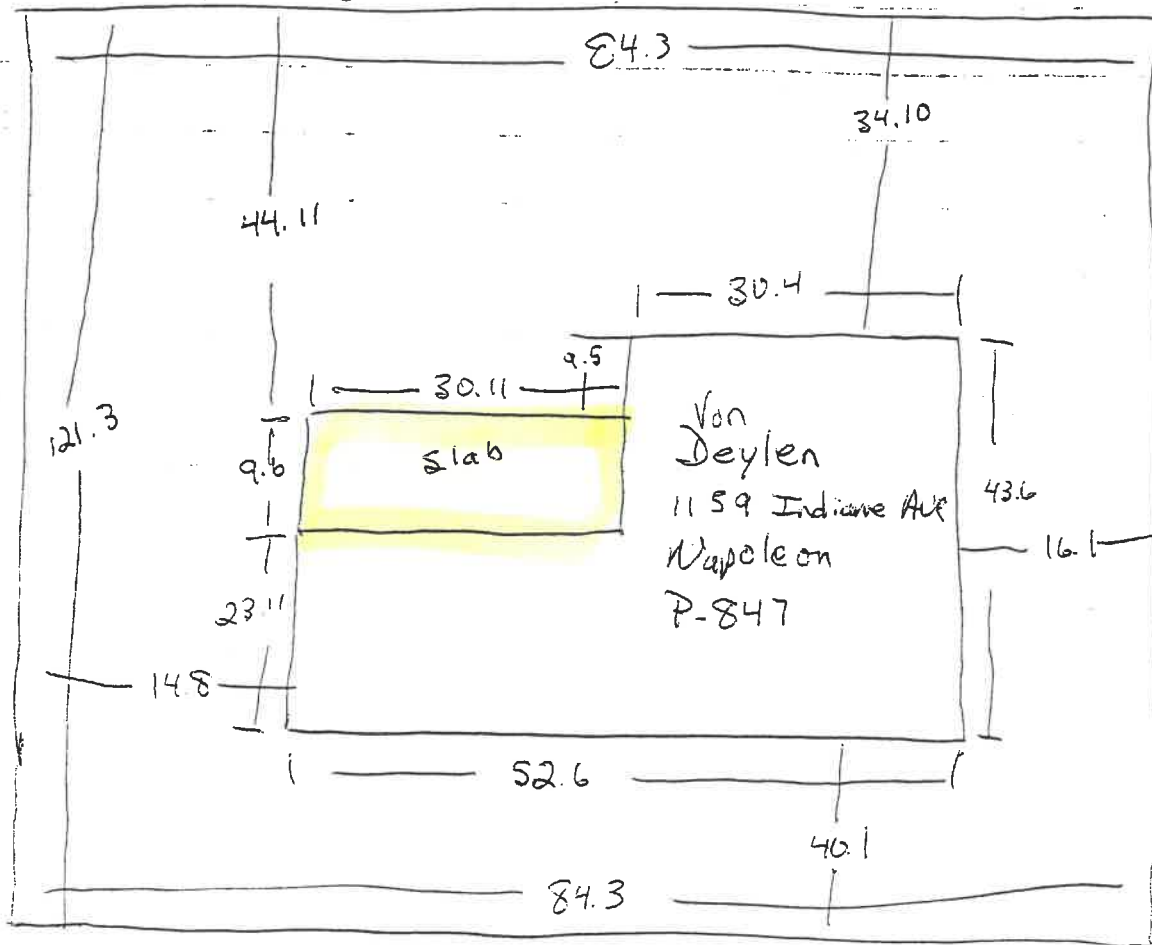
1/2" X 1/2" RED HEAD PHILLIPS ANCHOR
 TYPE JS-14 STUD TO CONCRETE ICBO 1372.6
 1/2" LAG BOLT 2" LONG TO EXISTING STUDS
 IN WOOD CONSTRUCTION



FOUNDATION REQUIREMENTS FOR CRAFT-BILT STANDARD ROOM ADDITION
 EXISTING BLDG. FOUNDATION
 PRE-MOLDED MASTIC EXPANSION JOINT
 1/2" X 1/2" TYPICAL JOINT
 1/2" X 1/2" SAND OR GRAVEL
 NOTE:
 (1) CONCRETE 2000 PSI.
 (2) ONE (1) POUR 14" X 16" NO EXPANSION JOINTS
 * ADJUSTED FOR FROST AS REQ'D

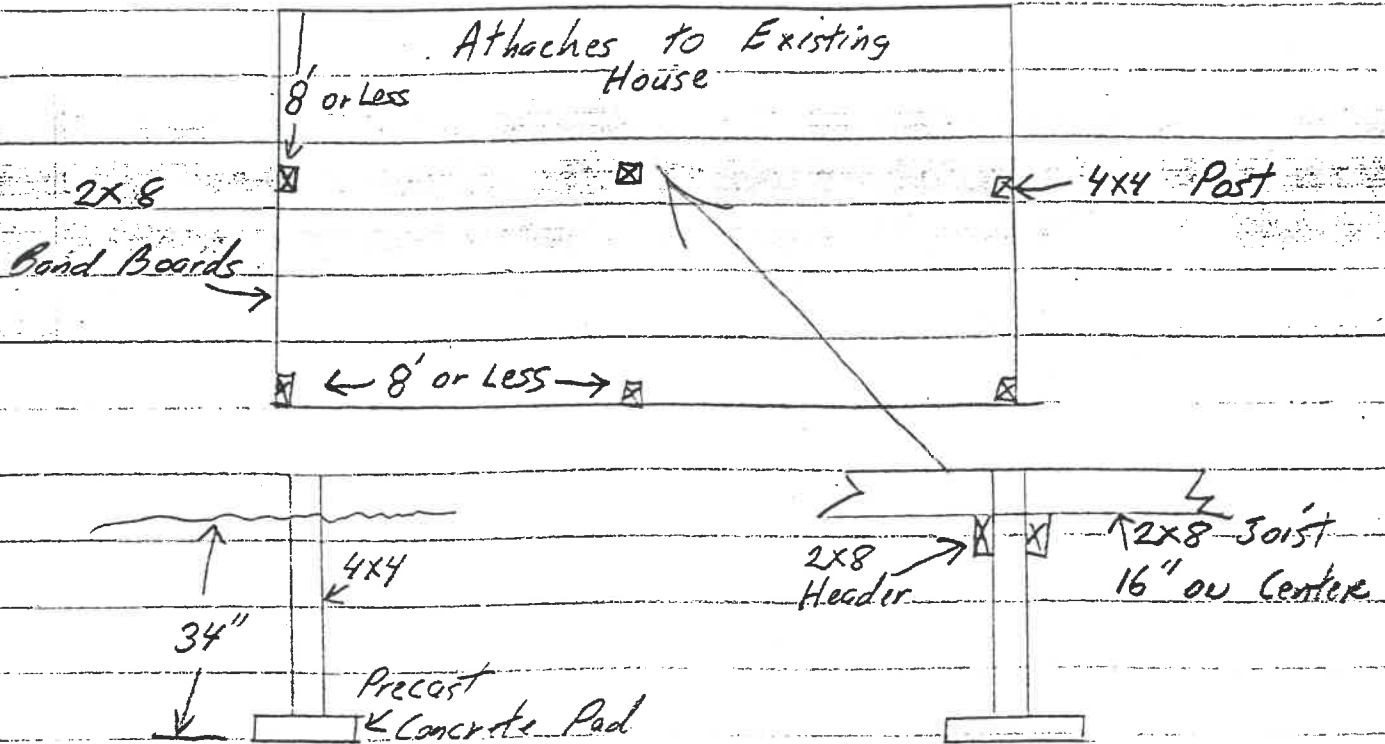
APR 27 1994

Handwritten signature



Indianq Ave

Not to Scale



4x4 Post 34" Below Grade. Sitting on
Precast Concrete Pads

2x8 Joist 16" on Center

2x8 Headers and Bond Boards

3/4" T&G Structure Wood Sub Floor

ALL Lumber Treated with a .40 Saturation Level
EXCEPT THE SUB FLOOR

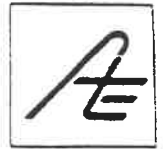
AMBRIC ENGINEERING, INC.

3502 SCOTTS LANE, PHILADELPHIA, PA 19129 ■ PHONE 215 438-2689
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- Consulting Engineers
- Surveyors
- Inspectors

CERTIFICATION BY PROFESSIONAL ENGINEER

Betterliving Patio Rooms
PanelCraft Honeycomb Building Panels



To Whom It May Concern:

The engineering tests and design data included in this brochure have been reviewed and approved by a professional engineer registered in the State of OHIO

The structural tests and design data described herein were performed in our laboratories under the direct supervision of professional engineers. Affixed is the official engineering stamp and authorized signature:

4-27-94

A handwritten signature in cursive script, appearing to read 'M. W. White'.

Please contact us if you have any questions about the engineering data contained in this brochure.

AMBRIC ENGINEERING, INC.

3502 SCOTTS LANE, PHILADELPHIA, PA 19129 ■ PHONE 215 438-2689
FAX 215 438-7110

- Consulting Engineers
- Surveyors
- Inspectors

April 27, 1994



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- Conformance Specifications for Polystyrene Roof Panels
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Yours sincerely,

Donald D. Meisel
President

CONFORMANCE SPECIFICATIONS

(HONEYCOMB WALL ASSEMBLIES)

TRANSVERSE LOAD (WALL LOADING DATA) : TEST TO A.S.T.M. E72-80 ON 3" THICK PANELS; UNIFORM LOADING USING AIR-BAG.

WALL SPAN (FT.)	6	6
TYPE OF WALL ASSEMBLY	SOLID (NO OPENINGS) (PSF)	FRAMED (DOORS/WINDOWS) (PSF)
MAXIMUM WALL LOAD	100	100
WALL LOAD AT DEFLECTION = (SPAN/180)	100+	86
WALL LOAD USED IN 24 HR LOAD/DEFN. TEST	80	80
ALLOWABLE WALL LOAD *	40	40

* FOUNDED ON THE LESSER OF a) THE MAXIMUM WALL LOAD WITH A SAFETY FACTOR OF 2.5 OR b) THE WALL LOAD AT DEFLECTION = (SPAN/180) OR c) THE WALL LOAD USED IN THE 24 HOUR LOAD / DEFLECTION RECOVERY TEST.

24 HOUR LOAD / DEFLECTION RECOVERY (WALL LOADING DATA) : TEST TO B.O.C.A. NATIONAL BUILDING CODE (1988 SUPPLEMENT), SECTION 1305.0 ON 3" THICK ASSEMBLIES; UNIFORM LOADING USING AIR BAG.

WALL SPAN (FT.)	6	6
	IMMED. RECOV.	RECOV. AFTER 24HR
SOLID WALL ASSEMBLY (12'7"x7'1"x3")	84.82%	92.55%
FRAMED WALL ASSEMBLY (12'5"x6'6"x3")	87.24%	92.76%

AXIAL COMPRESSIVE LOAD (WALL LOADING DATA) : TEST TO A.S.T.M. E72-80 ON 3" THICK PANELS.

TYPE OF WALL ASSEMBLY	SOLID (NO OPENINGS) (LBS) (LBS/FT)		FRAMED (DOORS/WINDOWS) (LBS) (LBS/FT)	
ULTIMATE AXIAL COMPRESSIVE LOAD	29400	2336	45445	3660
ALLOWABLE AXIAL WALL LOAD ***	11760	935	18178	1484

*** FOUNDED ON THE ULTIMATE AXIAL COMPRESSIVE LOAD WITH A FACTOR OF SAFETY OF 2.5

RACKING LOAD (WALL RACKING LOAD DATA) : TEST TO A.S.T.M. E72-80 ON 3" PANELS

TYPE OF WALL ASSEMBLY	SOLID (NO OPENINGS) (LBS) (LBS/FT)		FRAMED (DOORS/WINDOWS) (LBS) (LBS/FT)	
ULTIMATE RACKING LOAD * *	2130	170	2360	190
ALLOWABLE AXIAL WALL **	852	68	944	76

* * NO CLEAR POINT OF FAILURE, RATHER, PROGRESSIVE DETERIORATION AT PANEL CORNERS AND EDGES DUE TO INDIVIDUAL ROTATION OF PANELS WITH RESPECT TO THEIR CENTERS.

** FOUNDED ON THE ULTIMATE RACKING LOAD WITH A FACTOR OF SAFETY OF 2.5

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CONFORMANCE SPECIFICATIONS

(HONEYCOMB ROOF PANELS)

GENERAL : CONSTRUCTION DETAILS AND CONFORMANCE SPECIFICATIONS THAT WERE SUBMITTED IN BUILDING OFFICIALS AND CODE ADMINISTRATORS RESEARCH REPORT 85-46 (REVISED TO 82-66) TO BUILDING OFFICIALS AND CODE ADMINISTRATORS INTERNATIONAL INC., 4051 WEST FLOSSMOOR ROAD, COUNTRY CLUB HILLS, ILLINOIS, 60477-5795.

PHYSICAL PROPERTIES OF HONEYCOMB PANELING AND ATTACHING EXTRUSIONS :

FACING - A.S.T.M. 3004 H154 ALUMINUM ALLOY; SIZE 0.024"x37.1875"; YIELD STRENGTH 33,400 P.S.I.;
 ULTIMATE STRENGTH 34,600 P.S.I.; ELONGATION 1% TO 3.1%.

CORE - 99L8. KRAFT PAPER; 3/4" CELL SIZE; 11% RESIN IMPREGNATION; DENSITY 1.86 LBS/CU FT.;
 CRUSHING STRENGTH 85 P.S.I.; STRONG PLANE SHEAR 42 P.S.I.; WEAK PLANE SHEAR 23 P.S.I.

FACING AND CORE ADHESIVE - A CONTACT ADHESIVE COMPOSED OF SYNTHETIC RUBBER RESINS AND SOLVENTS THAT MEETS THE DURABILITY AND STRENGTH CRITERIA OF A.S.T.M. C-297, A.S.T.M. D-1780 (MODIFIED), A.S.T.M. D-2918 (MODIFIED).

ATTACHING EXTRUSIONS - A.S.T.M. 5063 T-5 ALUMINUM ALLOY TENSILE 22,000 P.S.I.; ELONGATION 8%.

TRANSVERSE LOAD (ROOF LOADING DATA) : TEST TO A.S.T.M. E72-80 ON 3" THICK PANELS; TWO POINT LOADING AT QUARTER SPAN

ROOF SPAN (FT.)	10		12		14	
ROOF PANELS WITH NO H-STIFFENERS	LBS	PSF	LBS	PSF	LBS	PSF
ULTIMATE ROOF LOAD	4013.7	147.2	3907.2	119.4	3544.2	92.8
ROOF PANELS WITH H-STIFFENERS	LBS	PSF	LBS	PSF	LBS	PSF
ULTIMATE ROOF LOAD	-	-	2910.0	88.9	3003.3	78.7

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CONFORMANCE SPECIFICATIONS

(POLYSTYRENE ROOF PANELS)

GENERAL : CONSTRUCTION DETAILS AND CONFORMANCE SPECIFICATIONS THAT WERE SUBMITTED IN BUILDING OFFICIALS AND CODE ADMINISTRATORS RESEARCH REPORT 85-46 (REVISED TO 82-66) TO BUILDING OFFICIALS AND CODE ADMINISTRATORS INTERNATIONAL, INC., INC., 4051 WEST FLOSSMOOR ROAD, COUNTRY CLUB HILLS, ILLINOIS, 60477-5795.

PHYSICAL PROPERTIES OF POLYSTYRENE PANELING AND ATTACHING EXTRUSIONS :

FACING - A.S.T.M. 3004 H154 ALLUMINUM ALLOY; SIZE 0.024"x37.1875"; YIELD STRENGTH 33,400 P.S.I.;
ULTIMATE STRENGTH 34,600 P.S.I.; ELONGATION 1% TO 3.1%.

CORE - ICA-LITE BRAND EXPANDED POLYSTYRENE; RIGID CLOSED CELL; SIZE 2 15/16"x35 3/8"; FT.;
COMPRESSIVE STRENGTH (10% DEFORMATION) 15-21 P.S.I.; FLEXURAL STRENGTH 40-50 P.S.I.; TENSILE STRENGTH 18-22 P.S.I.;
SHEAR STRENGTH 26-32 P.S.I.; SHEAR MODULUS 460-500 P.S.I.; ELASTIC MODULUS 320-360 P.S.I.

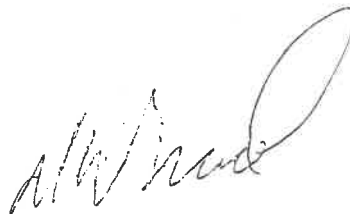
FACING AND CORE ADHESIVE - A CONTACT ADHESIVE COMPOSED OF SYNTHETIC RUBBER RESINS AND SOLVENTS THAT MEETS THE
DURABILITY AND STRENGTH CRITERIA OF A.S.T.M. C-297, A.S.T.M. D-1780 (MODIFIED), A.S.T.M. D-2918 (MODIFIED).

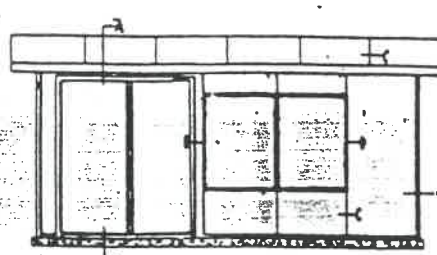
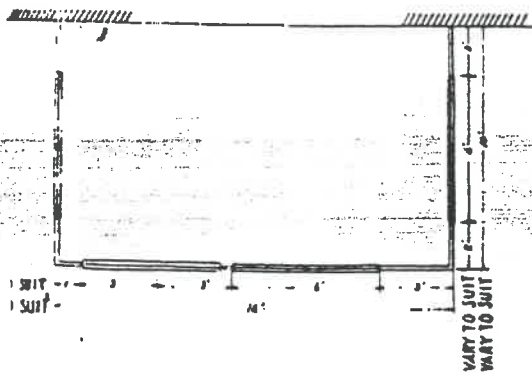
ATTACHING EXTRUSIONS - A.S.T.M. 5063 T-5 ALLUMINUM ALLOY TENSILE 22,000 P.S.I.; ELONGATION 8%.

TRANSVERSE LOAD (ROOF LOADING DATA) : TEST TO A.S.T.M. E72-80 ON 3" THICK PANELS; TWO POINT LOADING AT QUARTER SPAN

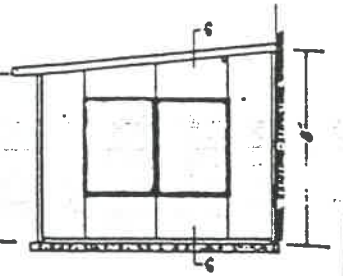
ROOF SPAN (FT.)	10		12		14	
ROOF PANELS WITH H-STIFFENERS	LBS	PSF	LBS	PSF	LBS	PSF
ULTIMATE ROOF LOAD	4158.0	152.5	3389.1	103.6	2123.3	55.6

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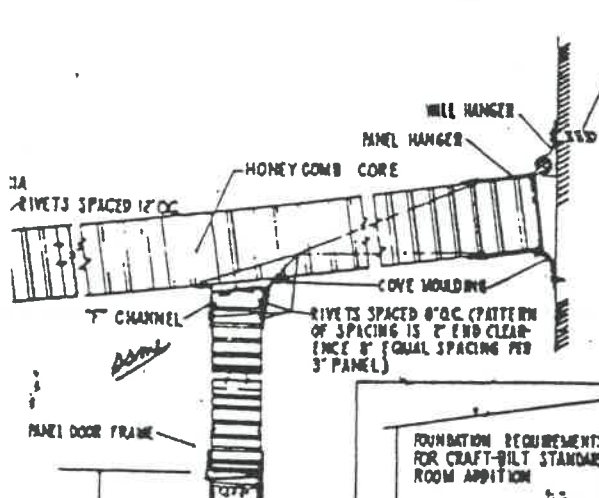




FRONT ELEVATION



SIDE ELEVATION

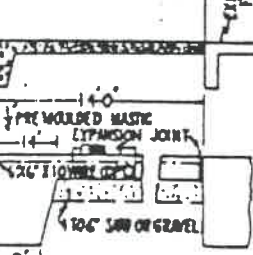


RED HEAD PHILLIPS ANCHOR
TYPE JS-14 STUD TO CONCRETE (CBO 1372.6
LAG BOLT 2" LONG TO EXISTING STUDS
IN WOOD CONSTRUCTION

PANEL DOOR FRAME

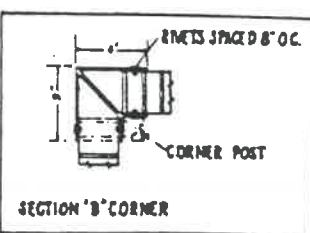
FOUNDATION REQUIREMENTS
FOR CRAFT-BILT STANDARD
ROOM ADDITION

EXISTING BLOC
FOUNDATION

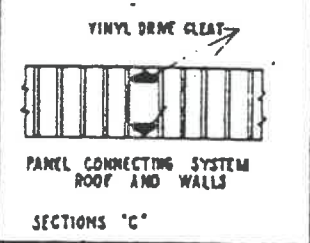


NOTE
(1) CONCRETE 2000 PSI.
(2) ONE (1) FOUR 1-1/2" NO EXPANSION JOINTS
* ADJUSTED FOR FROST AS REQ'D

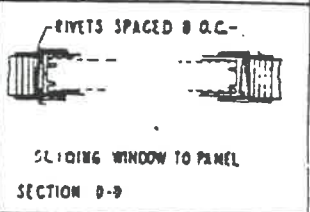
SECTION A-A



SECTION B-B CORNER

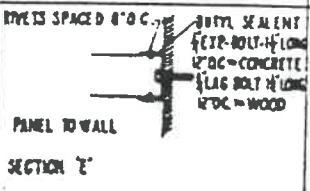


SECTIONS C-C



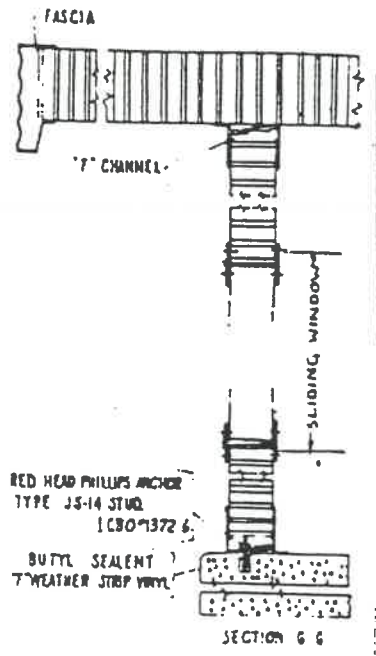
SLIDING WINDOW TO PANEL

SECTION D-D



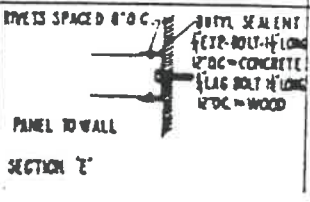
PANEL TO WALL

SECTION E-E



SECTION G-G

RED HEAD PHILLIPS ANCHOR
TYPE JS-14 STUD
CBO 1372.6
BUTYL SEALANT
7" WEATHER STRIP VINYL



WINDOW TO WINDOW

SECTION F-F

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ROOF BEAM SPAN TABLES

3 1/8" ARCHITECTURAL GRADE

SPAN FEET	BEAM DEPTHS							
	6"	7½"	9"	10½"	12"	13½"	15"	16½"
6	945 S	1244 S	1576 S	1947 S	2365 S	2839 S	3380 S	4008 S
7	651*	1026 S	1288 S	1574 S	1890 S	2239 S	2626 S	3080 S
8	434*	852*	1088 S	1321 S	1573 S	1847 S	2147 S	2474 S
9	303*	596*	942 S	1138 S	1347 S	1572 S	1814 S	2076 S
10	220*	433*	752*	999 S	1177 S	1368 S	1571 S	1788 S
11	164*	324*	563*	877 B	1045 S	1210 S	1385 S	1570 S
12	125*	248*	432*	689*	940 S	1085 S	1238 S	1399 S
13	97*	194*	338*	540*	806 B	983 S	1118 S	1261 S
14	77*	154*	269*	431*	646*	868 B	1020 S	1147 S
15	61*	124*	217*	348*	523*	748*	922 B	1053 S
16	50*	101*	178*	286*	429*	614*	809 B	970 B
17	41*	83*	147*	237*	356*	510*	703*	858 B
18		69*	123*	198*	299*	428*	560*	764 B
19		58*	103*	167*	252*	362*	500*	669*
20		48*	87*	142*	215*	309*	427*	571*
21		41*	74*	121*	184*	265*	367*	492*
22			64*	104*	159*	229*	318*	426*
23			55*	90*	138*	199*	276*	371*
24			47*	78*	120*	174*	242*	325*
25			41*	68*	105*	153*	213*	286*
26			36*	60*	92*	135*	188*	253*
27				52*	81*	119*	166*	224*
28				46*	72*	105*	148*	200*
29				41*	64*	94*	132*	178*
30				38*	57*	84*	118*	160*

3 1/2" INDUSTRIAL GRADE

SPAN FEET	BEAM DEPTHS							
	6"	7½"	9"	10½"	12"	13½"	15"	16½"
6	1058 S	1399 S	1765 S	2181 S	2649 S	3180 S	3787 S	4487 S
7	729*	1150 S	1443 S	1764 S	2117 S	2508 S	2942 S	3428 S
8	487*	954*	1220 S	1480 S	1763 S	2070 S	2405 S	2772 S
9	340*	668*	1056 S	1275 S	1509 S	1761 S	2033 S	2326 S
10	246*	485*	842*	1119 S	1319 S	1533 S	1760 S	2004 S
11	184*	363*	631*	983 B	1172 S	1366 S	1552 S	1759 S
12	140*	278*	484*	772*	1053 S	1216 S	1387 S	1567 S
13	109*	217*	379*	605*	904 B	1102 S	1254 S	1413 S
14	86*	173*	302*	483*	724*	973 B	1143 S	1286 S
15	69*	139*	244*	391*	587*	839*	1034 B	1180 S
16	56*	113*	200*	320*	482*	689*	907 B	1087 B
17	46*	93*	165*	266*	400*	572*	788*	962 B
18		78*	138*	222*	335*	480*	662*	856 B
19		65*	116*	188*	283*	407*	561*	750*
20		55*	98*	159*	241*	347*	479*	641*
21		46*	84*	136*	207*	298*	412*	552*
22			72*	117*	179*	258*	357*	478*
23			62*	102*	155*	224*	310*	416*
24			53*	88*	135*	196*	272*	365*
25			46*	77*	118*	172*	239*	321*
26			40*	68*	104*	151*	211*	284*
27				59*	92*	134*	187*	252*
28				52*	81*	119*	166*	224*
29				46*	72*	106*	148*	200*
30				41*	64*	94*	133*	180*

Vern Wachtman

Vern Wachtman Job

Span table for Door Beam

30 lb live load 1718 dead load

Rating needed 56A - Rating Allowed 572

Vern Wachtman

Von Dayton Job

Span table for Door Beam

30 LB live load 17LB dead load

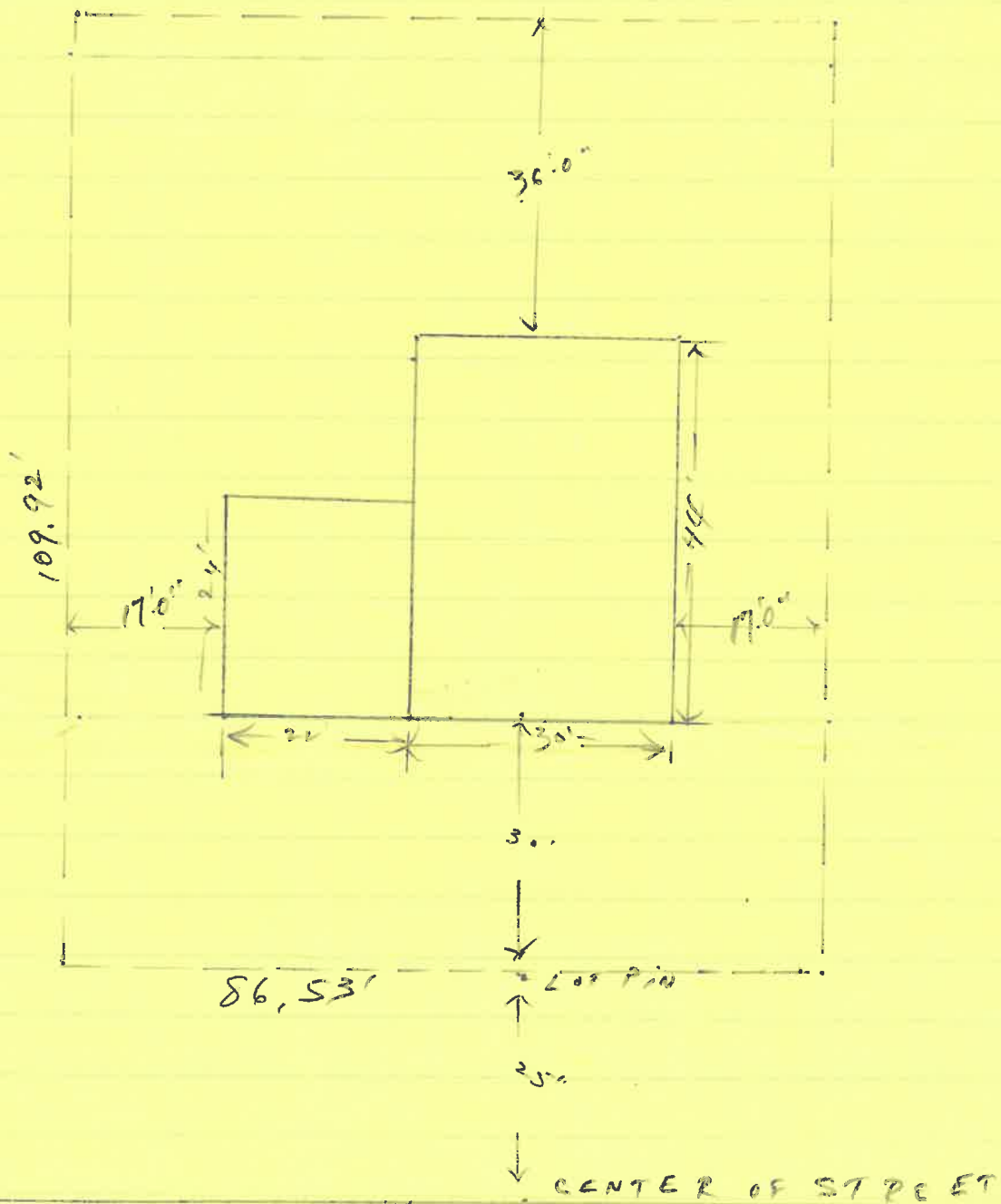
Rating Needed 564 - Rating Achieved 572

SITE PLAN

1" = 20' 0"

LOT SIZE - DOTTED LINE

BLDG - SOLID LINE



1159 INDIANA AVE

5/8" SUB FLOOR

2x8 FLOOR JOIST 16" O.C.

2x6 TRUSS RAFTERS

2x12 HEADERS

LAMINATED BEAM GARAGE

DOOR HEADER

3 1/2" x 13" x 17'

STONN
VISQORR)

5/8" CD X SUB FLOOR T & G

2x8 FLOOR JOIST 16" CENTERS

SEAL

2x8 PLATE X SILL

1/2" ANCHOR 18"
BOLT 6'-0" O.C
1'-0" FROM
EACH CORNER

CRAWL SPACE

48"

8" BLOCK

1/2" RE-BAR

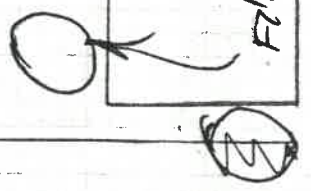
FIG. OR TILE

10"

GRADE

42"

2x8 BATTEN



TRUSSES @ 16" O.C.
2x6 RAFTER TRUSSES
18" FEET

TRUSSES @ 16" O.C.

18" FEET

TRUSSES @ 16" O.C.

1/2" CD x 3x6

1" TOP R SHEATHING 3/4"

GARAGE

2x4 BRIMMED FLOOR

1/2 PITCH

1/2 PITCH

12" INSULATION

DOUBLE 2x6 CEILING JOIST

DOUBLE 2x4 PLATE

2x4 GLASS

3/4" FIBER PRE-CUT 16" O.C.

1/2" 1/2" FIBER BAND

HOUSE

2x4 PLATE

2x8

2x8

DINYL SIDING

1" TOP R SHEATHING 3/4"

2x8

2x8

