

P E R M I T

CITY OF NAPOLEON  
255 W. RIVERVIEW AVE  
NAPOLEON, OHIO 43545

DIVISION OF BUILDING & ZONING  
PH (419) 592-4010  
FAX (419) 599-8393

PERMIT NO: 749

DATE ISSUED: 08-15-01

ISSUED BY: BND

JOB LOCATION: 944 MOSER DR

EST. COST: 2850.00

LOT #:

SUBDIVISION NAME:

OWNER: FRUTH, JAMES  
ADDRESS: 944 MOSER DR  
CS2: NAPOLEON, OH 43545  
PHONE: 419-592-4372

AGENT: SELF  
ADDRESS:  
CSZ:  
PHONE:

USE TYPE - RESIDENTIAL:

OTHER:

ZONING INFORMATION

DIST: LOT DIM: AREA: FYRD: SYRD: RYRD:  
MAX HT: # PKG SPACES: # LOADING SP: MAX LOT COV:

BOARD OF ZONING APPEALS:

WORK TYPE - NEW: REPLMNT: ADD'N: X ALTER: REMODEL:

WORK INFORMATION

SIZE - LGTH: WIDTH: STORIES: LIVING AREA SF:  
GARAGE AREA SF: HEIGHT: BLDG VOL DEMO PERMIT:

WORK DESCRIPTION  
REMODEL AND DECK  
BEDROOMS

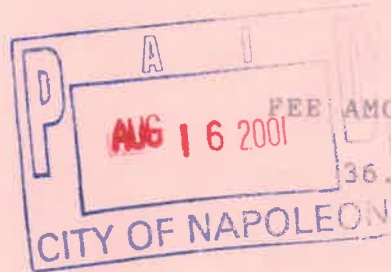
FEE DESCRIPTION

BUILDING PERMIT

PAID DATE

FEE AMOUNT DUE

36.00



TOTAL FEES DUE 36.00

DATE

APPLICANT SIGNATURE

X August 17, 2001

X James Fruth

CITY OF NAPOLEON INSPECTION FORM

PERMIT #: 749

DATE ISSUED: 08-15-2001

JOB LOCATION: 944 MOSER DR

OWNER: FRUTH, JAMES

OWNER PHONE: 419-592-4372

CONTRACTOR: SELF

CONTRACTOR PHONE:

WORK DESCRIPTION: REMODEL AND DECK

PLUMBING:    UNDGR \_\_\_\_\_    RGHIN \_\_\_\_\_    FINAL \_\_\_\_\_

              SEWER INSP \_\_\_\_\_

MECHANICAL:   UNDGR \_\_\_\_\_    RGHIN \_\_\_\_\_    FINAL \_\_\_\_\_

              FURNACE REPLC \_\_\_\_\_    AIR COND \_\_\_\_\_

ELECTRICAL:   UNDGR \_\_\_\_\_    RGHIN \_\_\_\_\_    FINAL \_\_\_\_\_

              SERV UPGR \_\_\_\_\_

BUILDING:     SITE \_\_\_\_\_    FTG \_\_\_\_\_    FNDDT \_\_\_\_\_

              STRUC \_\_\_\_\_    ROOF \_\_\_\_\_    EXT \_\_\_\_\_

              VENT \_\_\_\_\_    ACCES \_\_\_\_\_    EGRS \_\_\_\_\_

              SMKDT \_\_\_\_\_    FINAL \_\_\_\_\_

              ISSUE TEMP OCCUP \_\_\_\_\_    ISSUE OCCUP \_\_\_\_\_

STRG SHED:   SITE \_\_\_\_\_    FINAL \_\_\_\_\_

SIGN:        FTG \_\_\_\_\_    FINAL \_\_\_\_\_

FENCE:       SITE \_\_\_\_\_    FINAL \_\_\_\_\_

MISC INSP: \_\_\_\_\_

NOTES: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

INSPECTOR INITIALS: \_\_\_\_\_



# Better Living PATIO ROOMS Work Sheet

Job # 800  
Date 7-22-

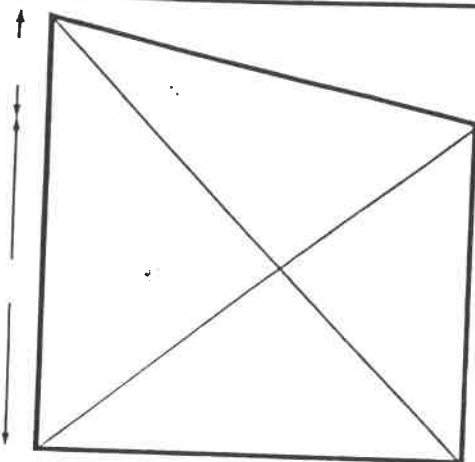
Client FIMÓANN FRUTH

Address 944 MOSCOW

City NAPOLÉAN

Phone number (Home) 592-4372

State OHIO Zip 43548  
Phone number (Work) \_\_\_\_\_



LEFT WALL

- Windows
- Door
- Deadlite

- Hinge
- right
- left

- Open
- in
- out

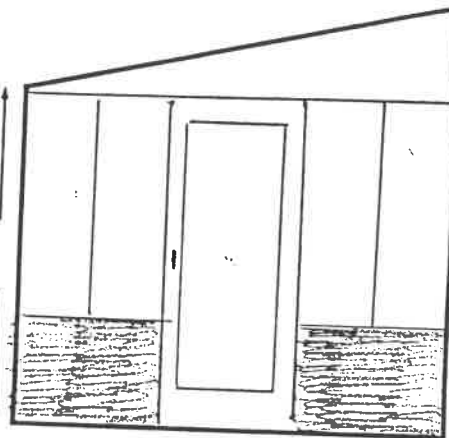
Sq. Ft.

- 2-3' Windows
- 1-36" Door
- Deadlite

- Hinge
- right
- left

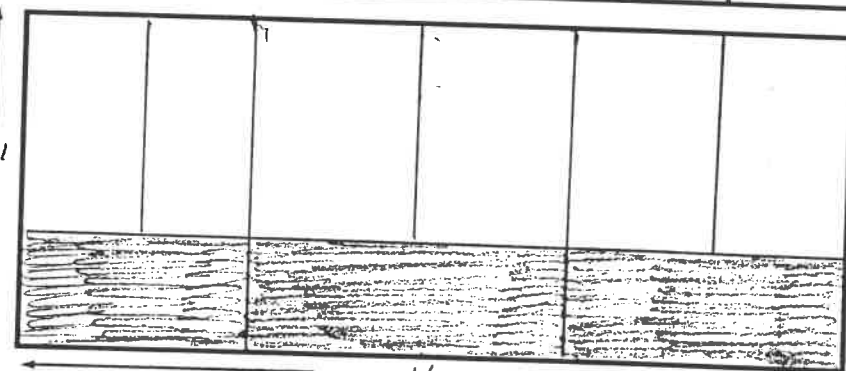
- Open
- in
- out

68 Sq. Ft.



RIGHT WALL

9'



FRONT WALL

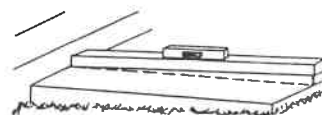
16'

- 2-5/8  
1-5/8 Windows
- Door
- Deadlite

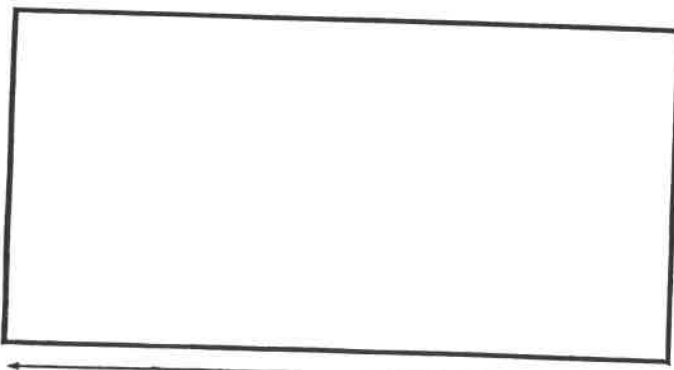
- Hinge
- right
- left

- Open
- in
- out

68  
112  
180 Sq. Ft.



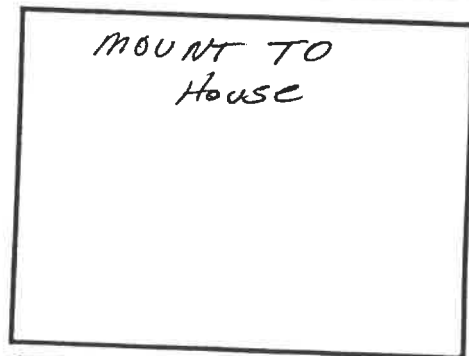
SLOPE OF PATIO



FLOOR PLAN

- Post
- Columns
- Fan Plate
- Plant Hooks

170 Sq. Ft.



ROOF AREA

10'

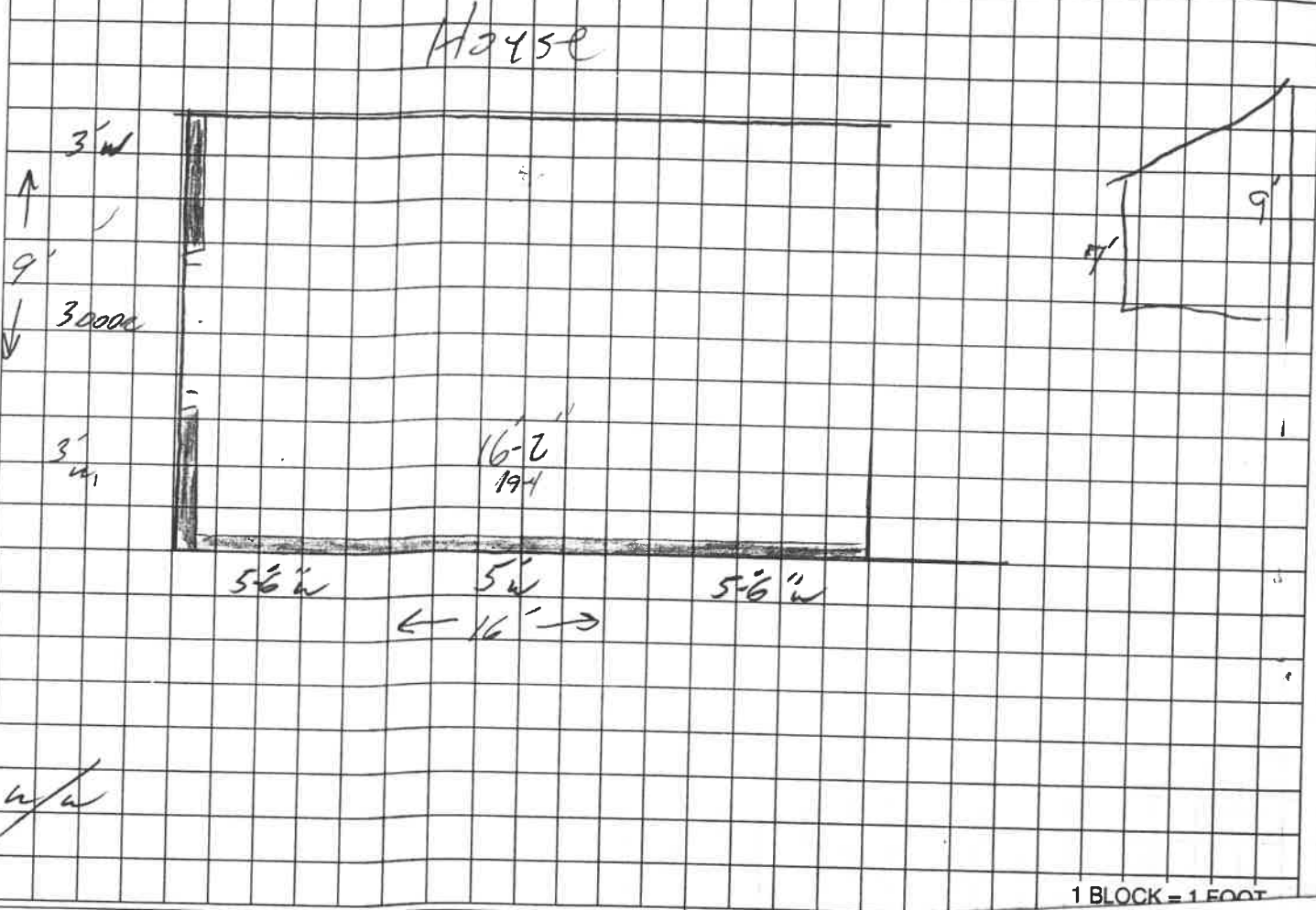
- INSTALL ON
- VINYL
  - WOOD
  - BRICK
  - SHINGLES
  - STUCCO
  - STONE
  - ALUMINUM SIDING

PANEL COLORS		
	IN	OUT
ROOF		
WALL	<u>W</u>	

EXTRUSION	
<input type="checkbox"/>	BROWN
<input checked="" type="checkbox"/>	WHITE
<input type="checkbox"/>	SANDSTONE


Sold by [Signature] checked by \_\_\_\_\_ date \_\_\_\_\_

CUSTOMER Jim and Anna Fruth	HOME JOB PHONE 592-4372	C.O.D. finance	ORD. DATE 7-27-00	# 8003
ADDRESS 944 Moser Drive	CITY (Henry) Napoleon, 43545	INST. BY...	DATE INST.	
1CBE - DEC		btcc - after 6:00 Mr off Wednesdays		



SPECIAL INSTRUCTIONS

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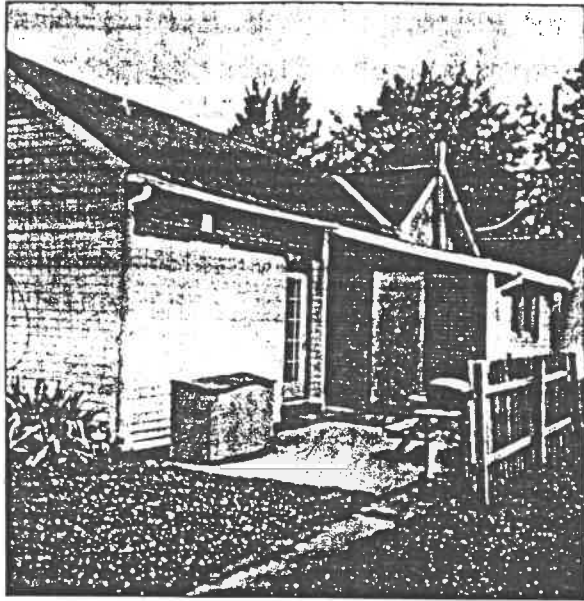
**CITY OF NAPOLEON**  
P.O. BOX 151 - 255 W. RIVERVIEW  
NAPOLEON, OHIO 43545

**BRENT N. DAMMAN**  
BUILDING & ZONING ADMINISTRATOR  
ADA OFFICIAL

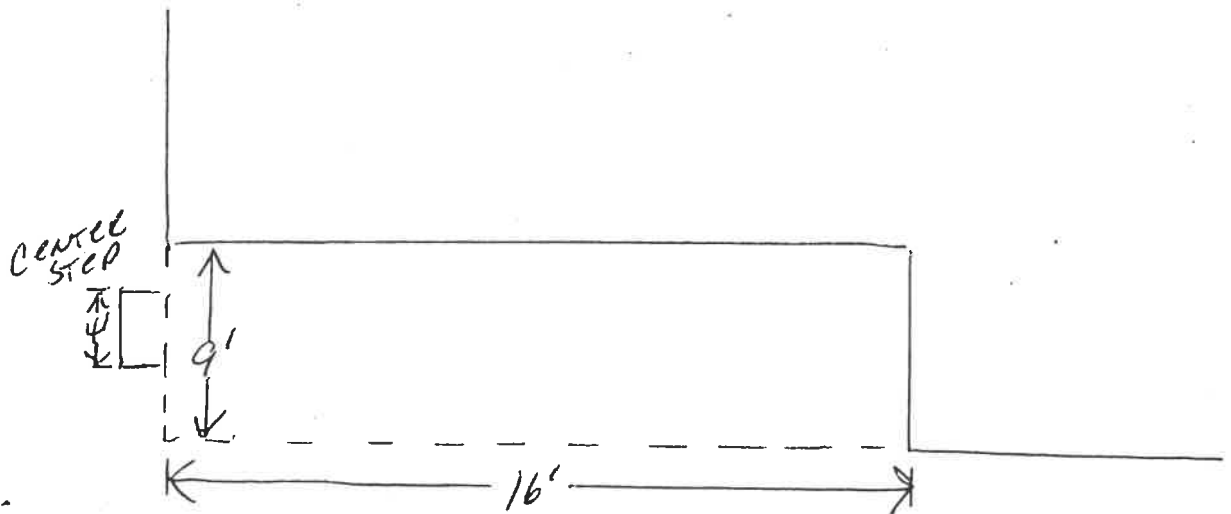
FAX (419) 599-8393      (419) 592-4010  
Business Hours Monday thru Friday 8:00 a.m. to 5:00 p.m.

8-18-00



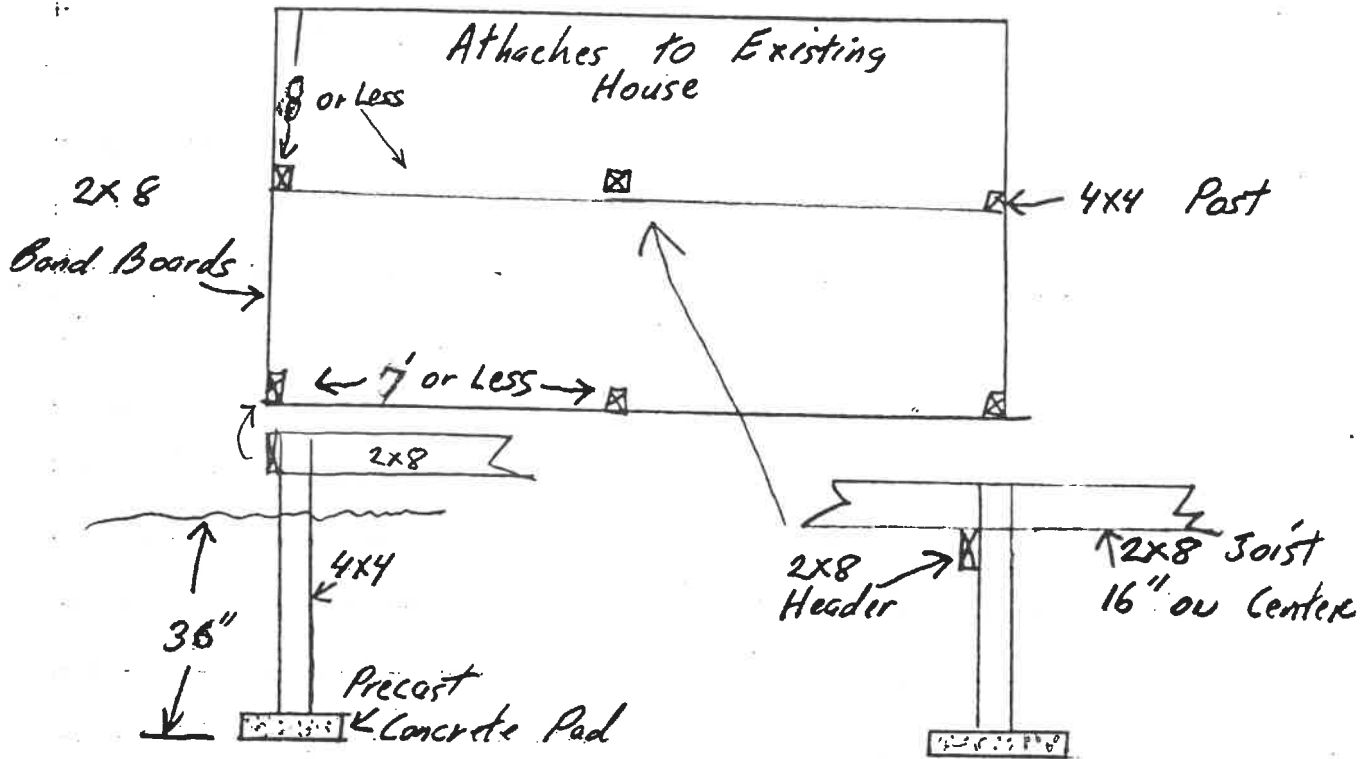


VIM ANNA FRUTH  
NAPOLEAN



# 3 Season Patio Room

Not to Scale



4x4 Post 36" Below Grade Sitting on  
Precast Concrete Pads

2x8 Joist 16" on Center

2x8 Headers and Band Boards

3/4" T&G Structure Wood Sub Floor

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

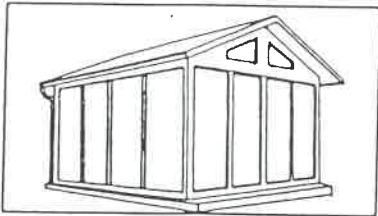
## 1.2 INTRODUCTION

1.2

### 11-1 BACKGROUND

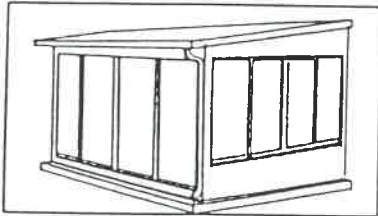
The patio rooms referenced in this package, known commercially as Betterliving® Patio Rooms, are manufactured and sold by Craft-Bilt Manufacturing Company of Souderton, PA. Craft-Bilt Manufacturing Company has manufactured a wide range of aluminum home improvement products since 1946.

### 11-2 BETTERLIVING PATIO ROOM SYSTEMS



#### A-FRAME ROOM

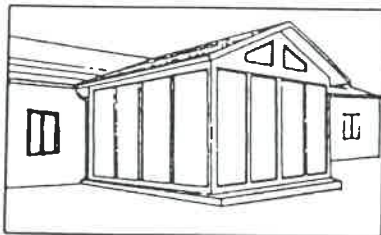
The gable or A-Frame roof construction features a structurally designed ridge beam of extruded aluminum alloy. The introduction of an independently supported ridge beam essentially eliminates all outward thrust at the eaves level.



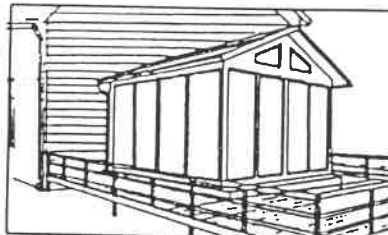
#### STUDIO ROOM

The mono-pitch or studio roof system features a pitched roof with a minimum slope of one inch per foot of projection. It is fastened to the existing structure by means of an extruded aluminum alloy section.

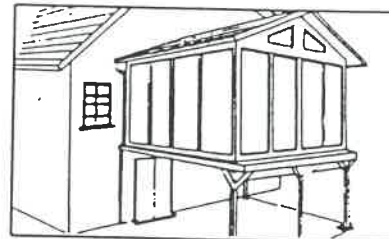
Betterliving Patio Rooms have been installed successfully in a variety of locations, as shown:



ROOM ON SLAB



ROOM ON DECK



ROOM ON BALCONY

### 11-3 STRUCTURAL PROPERTIES

Honeycomb and polystyrene panels were tested for load and deflection performance in accordance with the American Society for Testing and Materials (ASTM) method E72-80. Work was performed under the supervision of an independent engineering laboratory. Span tables in this package show the allowable roof loads.

### 11-4 FIRE RATINGS

Honeycomb and Polystyrene panels were tested for fire resistance by an independent testing laboratory. Based on the test results, the panels are classified as Type 5B construction materials.

### 11-5 WARRANTY

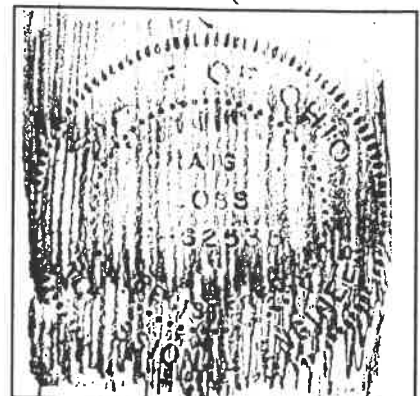
Properly installed products are warranted by the manufacturer. Contact Craft-Bilt Manufacturing Co. or refer to the Betterliving Engineering Manual for further information.

The following tables and figures have been reviewed and approved by a professional engineer.

Table #	Revision	Figure #	Revision
1-1	9811	40-1	9811
1-2	9811	40-2	9811
1-3	9811		
		50-1	9811
21-0	9811	50-2	9811
21-1a	9811		
21-1b	9811	73-1	9811
21-2a	9811	73-2	9811
21-2b	9811	75-1	9811
62-1	9811		
70-1	9811		
73-1	9811		
73-2	9811		
75-1	9811		

**State Seal**

*[Handwritten Signature]*  
 \_\_\_\_\_  
 Signature  
*2/9/99*  
 \_\_\_\_\_  
 Date





# TABLE 22-1 - CONFORMANCE SPECIFICATIONS FOR 3" THICK HONEYCOMB PANELS

## PHYSICAL PROPERTIES OF 3" THICK HONEYCOMB PANELS AND ATTACHING EXTRUSIONS

COMPONENT	MATERIAL	SIZE / PROPERTIES	STRENGTH
FACING	1 A S T M 3003 H194 2 A S T M 3004 H374 3 A S T M 3105 H194 ALUMINUM ALLOY	WIDTH = 37.2" ± 0.02" THICKNESS = 0.024" ± 0.001" DENSITY = 168 ± 3.0 PCF COEF TH EXP = 0.000013	1 TENSILE ULTIMATE STRENGTH = 27,000-33,000 PSI 2 TENSILE ULTIMATE STRENGTH = 35,000-41,000 PSI 3 TENSILE ULTIMATE STRENGTH = 32,000-38,000 PSI ELONGATION 1% TO 3%
CORE	HONEYCOMB 99# KRAFT PAPER 1 11% ± 2% RESIN CONTENT 2 18% ± 2% RESIN CONTENT	WIDTH = 35.0" ± 0.5" THICKNESS = 2.95" ± 0.01" CELL SIZE = 0.75" ± 0.15" DENSITY = 1.7 ± 0.25 PCF COEF TH EXP = 0.000069 ADSORPTION > 3%	1. COMPRESSIVE ULT STRENGTH (DRY) = 57.77 PŚI 1. COMPRESSIVE ULT STRENGTH (WET) = 20.28 PSI 1 SHEAR ULTIMATE STRENGTH (L) = 37.51 PSI 1 SHEAR ULTIMATE STRENGTH (T) = 20.28 PSI
ADHESIVE	MOISTURE CURING, ONE-PART, 100% SOLIDS, NON-VOLATILE, TYPE II URETHANE ADHESIVE	DENSITY = 68.5 PCF	FLEXURAL YIELD STRENGTH (L, AL-HC) = 992 PSI FLEXURAL YIELD STRENGTH (T, AL-HC) = 568 PSI
EXTRUSIONS	A S T M 6063 T6	A-FRAME SUPPORT PANEL HANGER H-, U-, C-, F-CHANNELS CORNER POST THERMAL BREAK W, HANGER	TENSILE ULTIMATE STRENGTH = 30,000 PSI TENSILE YIELD STRENGTH = 25,000 PSI COMPRESSIVE YIELD STRENGTH = 25,000 PSI SHEAR ULTIMATE STRENGTH = 19,000 PSI SHEAR YIELD STRENGTH = 14,000 PSI BEARING ULTIMATE STRENGTH = 63,000 PSI BEARING YIELD STRENGTH = 40,000 PSI MODULUS OF ELASTICITY = 10,100,000 PSI
PANEL	HONEYCOMB SANDWICH PANEL	WIDTH = 35.9" ± 0.1" THICKNESS = 3.0" ± 0.01" R-FACTOR = 4	STRENGTH CHARACTERISTICS TABULATED BELOW FLAME SPREAD INDEX = 40 SMOKE DEVELOPED INDEX = 335

## TRANSVERSE LOAD TABLE FOR 3" THICK HONEYCOMB PANELS

LOAD DESCRIPTION	ROOF LOADS (psf) FOR PANEL SPANS			
	8 ft	10 ft	12 ft	14 ft
<b>ULT. TRANSVERSE LOADS/FACTOR OF SAFETY</b>				
1. ROOF LOAD AT ULTIMATE TRANSVERSE LOAD / 1.0	170	140	105	82
2. ROOF LOAD AT ULTIMATE TRANSVERSE LOAD / 2.0	85	70	52	41
3. ROOF LOAD AT ULTIMATE TRANSVERSE LOAD / 2.5	68	56	42	33
4. ROOF LOAD AT ULTIMATE TRANSVERSE LOAD / 3.0	57	47	35	27
<b>DEFLECTION LOADS</b>				
5. ROOF LOAD AT PANEL DEFLECTION OF SPAN / 60	187	102	61	42
6. ROOF LOAD AT PANEL DEFLECTION OF SPAN / 120	94	51	30	21
7. ROOF LOAD AT PANEL DEFLECTION OF SPAN / 180	62	34	20	14

# TABLE 22-2 - CONFORMANCE SPECIFICATIONS FOR 3" THICK HONEYCOMB PANELS (CONTINUED)

24 HOUR TRANSVERSE LOAD TABLE FOR 3" x 12' SPAN HONEYCOMB PANELS

DESCRIPTION	TEST RESULTS
<b>24 HOUR TRANSVERSE LOAD</b>	
1 AVERAGE TRANSVERSE LOAD FOR 24 HOURS	62.5 psf
<b>24 HOUR DEFLECTION</b>	
2 INSTANTENOUS PANEL RECOVERY AFTER LOAD TEST	93.9 %
3 ROOF DEFLECTION AT 24 HOUR LOAD (62.5 psf)	2.4 in

RACKING LOAD TABLE FOR 8' x 8' ROOF SECTION USING 3" HONEYCOMB PANELS WITH VINYL CLEATS

DESCRIPTION	TEST RESULTS	
<b>ULT. RACKING LOADS/FACTOR OF SAFETY</b>		
1 ROOF LOAD AT ULTIMATE RACKING LOAD / 1.0	2400 lb	300 lb/ft
2 ROOF LOAD AT ULTIMATE RACKING LOAD / 2.0	1200 lb	150 lb/ft
3. ROOF LOAD AT ULTIMATE RACKING LOAD / 2.5	960 lb	120 lb/ft
4 ROOF LOAD AT ULTIMATE RACKING LOAD / 3.0	800 lb	100 lb/ft
<b>ULTIMATE RACKING DEFLECTION</b>		
5 ROOF DEFLECTION AT ULTIMATE RACKING LOAD	0.712 in	

# TABLE 23-1 - CONFORMANCE SPECIFICATIONS FOR 3" THICK HONEYCOMB PANELS WITH H-STIFFENERS

## PHYSICAL PROPERTIES OF 3" THICK HONEYCOMB PANELS AND ATTACHING EXTRUSIONS

COMPONENT	MATERIAL	SIZE / PROPERTIES	STRENGTH
FACING	1 A S T M 3003 H194 2 A S T M 3004 H374 3 A S T M 3105 H194 ALUMINUM ALLOY	WIDTH = 37.2" ± 0.02" THICKNESS = 0.024" ± 0.001" DENSITY = 168 ± 3.0 PCF COEF TH EXP = 0.000013	1 TENSILE ULTIMATE STRENGTH = 27,000-33,000 PSI 2 TENSILE ULTIMATE STRENGTH = 35,000-41,000 PSI 3 TENSILE ULTIMATE STRENGTH = 32,000-38,000 PSI ELONGATION 1% TO 3%
CORE	HONEYCOMB 99# KRAFT PAPER 1 11% ± 2% RESIN CONTENT 2 18% ± 2% RESIN CONTENT	WIDTH = 35.0" ± 0.5" THICKNESS = 2.95" ± 0.01" CELL SIZE = 0.75" ± 0.15" DENSITY = 1.7 ± 0.25 PCF COEF TH EXP = 0.000069 ADSORPTION > 3%	1 COMPRESSIVE ULT STRENGTH (DRY) = 57-77 PSI 1 COMPRESSIVE ULT STRENGTH (WET) = 20-28 PSI 1 SHEAR ULTIMATE STRENGTH (L) = 37-51 PSI 1 SHEAR ULTIMATE STRENGTH (T) = 20-28 PSI
ADHESIVE	MOISTURE CURING, ONE-PART, 100% SOLIDS, NON-VOLATILE, TYPE II URETHANE ADHESIVE	DENSITY = 68.5 PCF	FLEXURAL YIELD STRENGTH (L, AL-HC) = 992 PSI FLEXURAL YIELD STRENGTH (T, AL-HC) = 568 PSI
EXTRUSIONS	A.S.T.M. 6063 T6	A-FRAME SUPPORT PANEL HANGER M., U., C., F-CHANNELS CORNER POST THERMAL BREAK H. HANGER	TENSILE ULTIMATE STRENGTH = 30,000 PSI TENSILE YIELD STRENGTH = 25,000 PSI COMPRESSIVE YIELD STRENGTH = 25,000 PSI SHEAR ULTIMATE STRENGTH = 19,000 PSI SHEAR YIELD STRENGTH = 14,000 PSI BEARING ULTIMATE STRENGTH = 63,000 PSI BEARING YIELD STRENGTH = 40,000 PSI MODULUS OF ELASTICITY = 10,100,000 PSI
PANEL	HONEYCOMB SANDWICH PANEL WITH H-STIFFENERS	WIDTH = 35.9" ± 0.1" THICKNESS = 3.0" ± 0.01" R-FACTOR = 4	STRENGTH CHARACTERISTICS TABULATED BELOW FLAME SPREAD INDEX = 45 SMOKE DEVELOPED INDEX = 230

## TRANSVERSE LOAD TABLE FOR 3" THICK HONEYCOMB PANELS WITH H-STIFFENERS

LOAD DESCRIPTION	ROOF LOADS (psf) FOR PANEL SPANS		
	10 ft	12 ft	14 ft
<b>ULT. TRANSVERSE LOADS/FACTOR OF SAFETY</b>			
1 ROOF LOAD AT ULTIMATE TRANSVERSE LOAD / 1.0	219	154	119
2 ROOF LOAD AT ULTIMATE TRANSVERSE LOAD / 2.0	110	77	60
3 ROOF LOAD AT ULTIMATE TRANSVERSE LOAD / 2.5	88	61	48
4 ROOF LOAD AT ULTIMATE TRANSVERSE LOAD / 3.0	73	51	40
<b>DEFLECTION LOADS</b>			
5 ROOF LOAD AT PANEL DEFLECTION OF SPAN / 60	160	99	65
6 ROOF LOAD AT PANEL DEFLECTION OF SPAN / 120	80	49	33
7 ROOF LOAD AT PANEL DEFLECTION OF SPAN / 180	53	33	22

# TABLE 70-1 - FASTENER NOTES

7.0 It

## MANUFACTURER'S PERFORMANCE DATA

### Performance Data - TEK Self Drilling Fasteners

PULLOUT VALUES (average lbs. ultimate)								
Fastener		Steel Gauge						
Dia.	Pt.	26	24	22	20	18	16	14
#6	2	120	183	248	296	471	679	847
#8	2	119	193	265	298	491	703	959
#10	2	131	214	272	368	547	784	1033

SHEET GAUGES								
Gauge No.	18	20	21	22	23	24	25	26
Alum. Decimal Equiv.	0.040"	0.032"	0.028"	0.025"	0.023"	0.020"	0.018"	0.018"
Steel Decimal Equiv.	0.048"	0.036"	0.034"	0.030"	0.027"	0.024"	0.021"	0.018"

FASTENER VALUES			
Fastener (dia-tpi)	Tensile (lbs. min.)	Shear (ave. lbs. ult.)	Torque (min. in. lbs.)
6 to 20	1285	750	25
8 to 18	1545	1000	42
10 to 16	1936	1400	61

SHEAR VALUES (average lbs. ultimate)						
Fastener		Steel Gauge (lapped)				
Dia.	Pt.	26/26	24/24	22/22	20/20	18/18
#6	2	278	466	526	758	845
#8	2	294	496	560	740	1060
#10	2	312	478	589	830	1206

The values listed above, provided by the fastener manufacturer, are ultimate averages achieved under laboratory conditions.

### Installation Guidelines

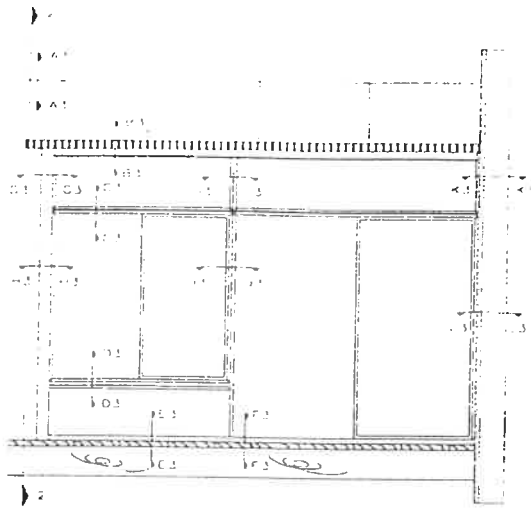
- 1) Spacing between fasteners shall always exceed 0.5 inches.
- 2) Clearance between fasteners and edge of sheet or shape shall always exceed 0.5 inches.
- 3) Use a standard screwgun with a depth sensitive nosepiece to install Tek's. For optimal fastener performance, the screwgun should be a minimum of 4 amps and have a RPM range of 0-2000.
- 4) Adjust the screwgun nosepiece to properly seat the fastener.
- 5) Set new magnetic sockets correctly before use. Remove chip buildup as needed.
- 6) The fastener is fully seated when the head is flush with the work surface.
- 7) Overdriving may result in torsional failure of the fastener or stripout of the substrate.
- 8) The fastener must penetrate beyond the metal structure a minimum of 3 pitches of thread.

### NOTES

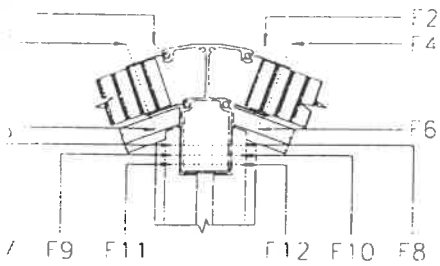
- 1) For calculation purposes (Table 72-1 through 76-1), assume:
  - Allowable pull out strength of 8-18 T2 in 0.024" aluminum sheet = 70 lb.
  - Silicone bonding transfers 25% of connection load.
  - Allowable shear strength of 8-18 T2 in 0.024" aluminum sheet = 170 lb.
  - Allowable bearing strength of 8-18 T2 in 0.065" aluminum sheet = 125 lb.

# FIGURE 73-1 - WALL CONNECTIONS

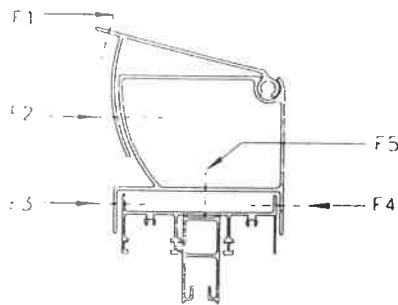
7.3.1



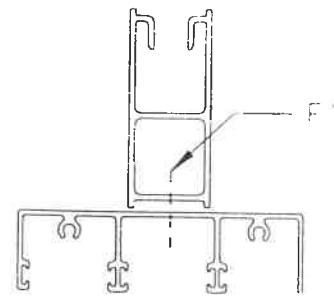
A-FRAME ROOM SIDE WALL SECTION (3-3)



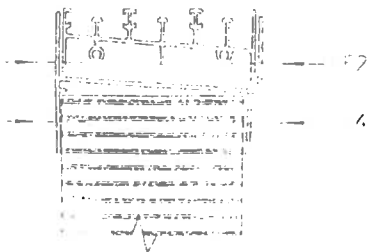
SECTION A-3



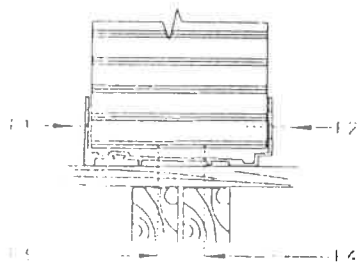
SECTION B-3



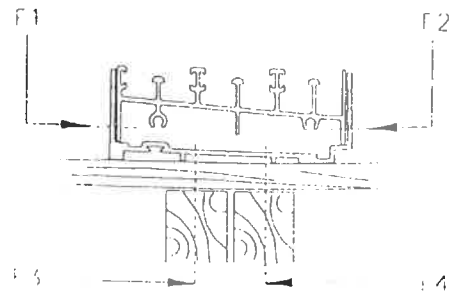
SECTION C-3



SECTION D-3



SECTION E-3



SECTION F-3

# TABLE 73-1 - WALL CONNECTIONS

731c

FASTENER SPECIFICATIONS FOR A-FRAME SIDE WALL

FASTENERS						SPAN	MAXIMUM SPACING BETWEEN FASTENERS (In)					
SECTION	FASTENER SET	DESIGNATION	SILICONE SEAL	CONNECT FROM	CONNECT TO	PANEL (ft)	UPLIFT 10 psf	UPLIFT 20psf	UPLIFT 30 psf	UPLIFT 40 psf	UPLIFT 50 psf	
A-3	F1	# 8 x 1/2" (Tek)	Yes	A-Frame Flange	A-Frame Beam	8'-18"	ends only	ends only	ends only	ends only	ends only	
	F2	# 8 x 1/2" (Tek)	Yes	A-Frame Flange	A-Frame Beam							
	F3	# 8 x 1/2" (Tek)	Yes	A-Frame Flange	Roof Panel	8'	8"	8"	8"	8"	8"	
	F4	# 8 x 1/2" (Tek)	Yes	A-Frame Flange	Roof Panel	10'	8"	8"	8"	8"	8"	
	F5	# 8 x 1/2" (Tek)	Yes	A-Frame Flange	Roof Panel	12'	8"	8"	8"	8"	7"	
	F6	# 8 x 1/2" (Tek)	Yes	A-Frame Flange	Roof Panel	14'	8"	8"	8"	8"	6"	
	F7	# 8 x 1/2" (Tek)			3" H	A-Frame Beam	8'-16"	double fastener	double fastener	double fastener	triple fastener	triple fastener
	F8	# 8 x 1/2" (Tek)			3" H	A-Frame Beam						
	F9	# 8 x 1/2" (Tek)			3" H	A-Frame Beam						
	F10	# 8 x 1/2" (Tek)			3" H	A-Frame Beam						
	F11	# 8 x 1/2" (Tek)			3" H	A-Frame Beam						
	F12	# 8 x 1/2" (Tek)			3" H	A-Frame Beam						
B-3	F1	# 8 x 1/2" (Tek)		Header Arm	Roof Panel	8'	8"	8"	7"	6"	4"	
						10'	8"	8"	6"	5"	4"	
						12'	8"	8"	5"	4"	3"	
						14'	8"	7"	5"	4"	3"	
						16'	8"	6"	4"	3"	2"	
	F2	# 8 x 1/2" (Tek)		Header Arm	Header Support	Header Support	8'	30"	24"	18"	15"	12"
							10'	30"	30"	17"	13"	10"
							12'	30"	18"	14"	11"	9"
							14'	30"	18"	13"	9"	8"
							16'	30"	17"	11"	8"	7"
	F5	# 8 x 3/4" (Tek)		Door Header	Header Support	18'	30"	15"	10"	8"	6"	
8'-18'	24"	24"	24"	24"	24"							
C-3	F1	# 8 x 1/2" (Tek)	Yes	Glass Handle	Door Header	8'-18'	24"	24"	24"	24"	24"	
D-3	F1	# 8 x 1/2" (Tek)		Off-Set H	Window Sill	8'-18'	15"	15"	15"	15"	15"	
F2	# 8 x 1/2" (Tek)		Off-Set H	Wall Panel								
F3	# 8 x 1/2" (Tek)		Off-Set H	Window Sill								
F4	# 8 x 1/2" (Tek)		Off-Set H	Wall Panel								
E-3	F1	# 8 x 1/2" (Tek)		W/F-Channel	Wall Panel	8'-18'	15"	15"	15"	15"	15"	
	F2	# 8 x 1/2" (Tek)		W/F-Channel	Wall Panel							
	F3	# 14 x 2"-3" (Hex)	Yes	W/F-Channel	Wooden Deck	8'-18'	32"-48" +3/column	32"-48" +3/column	32"-48" +3/column	32"-48" +3/column	32"-48" +3/column	
	F4	# 14 x 2"-3" (Hex)	Yes	W/F-Channel	Wooden Deck							
F3	1/4"x1 1/2" Nail Anchor	Yes	W/F-Channel	Concrete Slab								
F4	1/4"x1 1/2" Nail Anchor	Yes	W/F-Channel	Concrete Slab								
F-3	F1	# 8 x 1/2" (Tek)		D/F-Channel	Door Sill	8'-18'	12"	12"	12"	12"	12"	
	F2	# 8 x 1/2" (Tek)		D/F-Channel	Door Sill							
	F3	# 14 x 2"-3" (Hex)	Yes	D/F-Channel	Wooden Deck	8'-18'	16"-24" +3/column	16"-24" +3/column	16"-24" +3/column	16"-24" +3/column	16"-24" +3/column	
	F4	# 14 x 2"-3" (Hex)	Yes	D/F-Channel	Wooden Deck							
F3	1/4"x1 1/2" Nail Anchor	Yes	D/F-Channel	Concrete Slab								
F4	1/4"x1 1/2" Nail Anchor	Yes	D/F-Channel	Concrete Slab								

1) See Figure 73.1 and 73.2  
2) See Table 70.1