#### PERMIT

# CITY OF NAPOLEON - BUILDING DEPARTMENT 255 West Riverview Avenue, Napoleon, Ohio 43545 - 419-592-4010

date	-	FEES	BASE	PLUS	TOTAL
Job Location 620 Rohm Drive	_ 🕸 BL	ILDING	9.00	230.40	239.40
Lot 91 Anthony Wayne Acres 5th sub-div or legal discript	AdEXX EL	ECTRICAL	_15.00	90.00	105.00
Issued By Eldon Huber  building official	- £OK PL	UMBING	9.00	60.00	69.00
Owner William Wright tel.	1		18.00		
Address 525 Rohm Drive	I	CHANICAL		32.00	50.00
Agent Siebenaler Cons. 636-317	3 P DE	MOLITION	0-0		-
Address R 1 06559 Rt. 34	Z .zo	NING .	5.00		5.00
Edon, Ohio 43518  Description of Use Residence	p sic	3N			
107 EFF	XXWAT	ER TAP	375.00		375.00
Residential 1 no. dwelling units	Insp	ection for	ee 60.00		60.00
CommercialIndustrial	xx te	mp water	5.00	2.11	5.00
NewXAdd'nAlterRemodel		P. ELECT.	10.00	cinta	10.00
Mixed Occupancy		PLAN PLAN	Struct. <sup>2</sup> p1	4900	1 491 5
Change of Occupancy	F	EVIEW	Elect. 2 co	opies hrs .	.50
Stimated Cost \$ 102,550.00 Plumbing 7,600.00					1000
Heating 7,600.00 Heating 7,800.08 Electrical 7,800.08 ZONING INFORMATION		SS MIN. FE	ES PAID	ate	NAME OF THE PARTY
Heating 7,888.08 Electrical 7,888.08 ZONING INFORMATION  district lot dimensions area	BA	ALANCE DU	Eside	yds	rear yd
Heating 7,800.00 Electrical 7,800.00 ZONING INFORMATION  district lot dimensions area	BA	ALANCE DU	E	yds 20' 90	July 2
Heating 7,800.08 ZONING INFORMATION  district lot dimensions area S 162,41'× 172,62' 27,864  max hgt no pkg spaces no ldg spaces Z-MIN  VORK INFORMATION: 76' 10" x 36' 10" 26' 4" x 24' 8" Size: Length 76' Width 54' Sto	From the state of	petition  Ba Ga	Eside	2,238 650	rear yd date appr
Heating 7,800.08  ZONING INFORMATION  district lot dimensions area  S /62+1/x /72.62/ 27,864  max hgt no pkg spaces no ldg spaces  Z-M/W  VORK INFORMATION: 76' 10" x 36' 10" 26' 4" x 24' 8"  Size: Length 76' Width 54' Store  Height 12' Building Volume (for decomposition)	From the second	petition  Ba Ga Grou	side 1-23/ R- or appeal req'd asement arage	2,238 650 2,402	rear yd date appr
Heating 7,800.08  ZONING INFORMATION  district lot dimensions area  S	from from 30%  pries 1  promo. permit)  & 30 ci	petition  Ba  Ga  Ground	side 1-23/ 2- n or appeal req'd asement arage und Floor Area	2,238 650 2,402	rear yd  date appr  S.F. S.F. S.F.
Heating 7,800:00  ZONING INFORMATION  district lot dimensions area  S	from sover 30% ories 1  emo. permit)  a & 30 ci  2 laund.	petition  Ba  Ga  Ground  rcuits  sinks r	side 1-23/ 2- n or appeal req'd asement rage und Floor Area	2,238 650 2,402	date appr  S.F. S.F. S.F. cu. ft.
Heating 7,800:00 ZONING INFORMATION  district lot dimensions area  S	from sover 30% ories 1  emo. permit)  a & 30 ci  2 laund.	petition  Ba  Ga  Ground  rcuits  sinks r	side 1-23/ 2- n or appeal req'd asement rage und Floor Area	2,238 650 2,402	date appr  S.F. S.F. S.F. cu. ft.
Heating 17,800.00 ZONING INFORMATION  district lot dimensions area 27,864  max hgt no pkg spaces no ldg spaces 2-M/N  VORK INFORMATION: 76' 10" x 36' 10" 26' 4" x 24' 8"  Size: Length 76' Width 54' Store brief description dechanical: 200 amp underground service brief description brief description lign: N.A. Dimensions	from sover 30% ories 1  emo. permit)  a & 30 ci  2 laund.	petition  Ba Ga Ground  rcuits  sinks r  as fired	side 1-23/ 2- n or appeal req'd asement rage und Floor Area	2,238 650 2,402	date appr  S.F. S.F. S.F. cu. ft.
Heating 7,800:00 ZONING INFORMATION  district lot dimensions area  S	from from from from from from from from	petition  Ba Ga Ground  rcuits  sinks r  as fired	side 2-23/ 2- n or appeal req'd asement arage and Floor Area eq. in fo furnace ign Area	2,238 650 2,402	date appr  S.F. S.F. S.F. cu. ft.
Heating 7,800.00 ZONING INFORMATION  district lot dimensions area 27,864  max hgt no pkg spaces no ldg spaces 2-M/N  VORK INFORMATION: 76' 10" x 36' 10" 26' 4" x 24' 8"  Size: Length 76' Width 54' Store brief description lechanical: 200 amp underground service brief description lechanical: 60,000 B.T.U. forced air no brief description lign: N.A. Dimensions	from from from from from from from from	petition  Ba Ga Ground  rcuits  sinks r  as fired	side 2-23/ 2- n or appeal req'd asement arage and Floor Area eq. in fo furnace ign Area	2,238 650 2,402	date appr  S.F. S.F. S.F. cu. ft.

· White-Building Department Yellow-Applicant

Pink-Electrical Inspector

Green-Clerk-Treasurer

Gold-County Auditor

# INSPECTION RECORD

1	UNDERGRO	ROUND ROUGH-IN FINAL					,	<u>;</u> ′′				
	Туре	Date	Ву	Туре	Date	Ву	Туре	Date	Ву	Туре	Date	Ву
	Building	Date	Бу	Drainage, Waste *  & Vent Piping		54	Indirect Waste			Drainage, Waste 2	2	» 3.
5	Drains Water			d. voilt i iping						Backflow Prevention 4	3	- 17
PLOMBIN	Piping Building Sewer			Water Piping		51	Condensate Lines			Water 7/j	3	
7	Sewei											-
	Sewer Connection			Jeans						FINAL 2/	13	51
	Refrigerant	-		Refrigerant Piping			Chimney(s)			Grease Exhaust System	1+	
AL	Piping			Duct Furnace(s)		-	Fire Dampers			Air Cond. Unit(s)		
AN O	Ducts/ Plenums			Ducts/ Plenums			□ Radiant Htr(s) □ Unit Htr(s)			Refrigeration Equipment		- 3
MECHANICAL	Pieriums			Duct Insulation			Pool Heater			Furnace(s)		
Σ				Combustion Products Vents			Ventilation □ Supply □ Exhst.			FINAL APPROVAL	2/13	5
	Conduits &			Conduits/			□ Range □ Dryer			Temp Service Temp Lighting		
ب	or Cable Grounding &			Rough Wiring	-		☐ Generator(s) ☐ Motors			Fixtures Lampholders		
RICA	or Bonding Floor Ducts		-	Service Panel Switchboard			□ Water Htr □ Welder			Signs		
ELECTRICAL	Raceways Service Conduit		+	Busways Ducts			□ Heaters □ Heat Cable			Electric Mtr. Clearance		
Ш	Temporary Power Pole			Subpanels			□ Duct Htr(s) □ Furnace(s)			FINAL APPROVAL		
	Location, Set- backs, Esmt(s)	1	54	Exterior Wall Construction		5	Roof Covering Roof Drainage		5	Smoke Detector	10	5
	Excavation		E				Exterior Lath			Demolition (sewer cap)		
	Footings & Reinforcing	1	5	2.4	-		☐ Interior Lath ☐ Wallboard			1 11 1-1		
UNG	Floor		5,	Interior Wall Construction		5	Fire Wall(s)			Building or Structure	10/12	5
BUILDIN	Foundation Walls		5	Columns & Supports			Fireplace Chimney					
m	Sub-soil Drain		7	Crawl Space  □ Vent □ Access			Attic		5,			
	Piles			Floor System(s)		5	,		4	FINAL APPROVAL BLDG. DEPT.	10/15	5
				Roof System		5	Special Insp Reports Rec'd			Certificate of Occupancy Issued	10/1	25
E DESIGN		INSP	ECTI	ONS, CORRECTIO	ONS, I	ETC.				, CORRECTIONS,	ETC.	
	* BECO	ies Fi	F11	257 Frank	110 9/	151	+ 131	TCK		7007		18
ONA						4	110 BASEM	ENT	10	MOKN DET		1
ADDITIONAL							110 HARD	WI	IZ IZ	DI VERBACIO	125	+
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CITY OF NAPOLEON 255 West Riverview Avc. Napoleon, Ohio 43545

DATE RECHECKED AND APPROVED\_

ADDENDUM TO Permit No. 01603 Owner WILLIAM ORIGHT Contractor SIER FURLER

419/592-4010 Location 620 TOHM DRIVE Plead note the items checked below and incorporate them into your plans as indicated: PERMIT NOT YET ISSUED, CORRECT PLANS AND RE-SUBMIT. EXPERMIT ISSUED, INCORPORATE ITEMS DURING CONSTRUCTION. GENERAL Show size of members supporting porch roof. Provide approved smoke detector(s) as reg'd. Provide double top plate for all bearing partitions and exterior walls. Provide 5" gypsum wallboard between dwelling and garage, on garage side. Provide design data for prefab wood truss. Provide min. 1 3/8" solid wood door from Ceiling joists undersized in garage to dwelling. (or equal) Roof rafters undersized in Submit fully dimensioned plot plan. PLUMBING AND MECHANICAL Provide min. of 1-3'0" x 6'8" exit door. Terminate all exhaust systems to outside air. Provide min. 22" x 30" attic access opening \*\* Insulate ducts in unheated areas. Provide min. 18" x 24" crawl space access Provide backflow prevention device on all hose bibs. Provide approved sheathing or flashing behind masonry veneer. Terminate pressure and temperature relief valve drain in an approved manner. Provide min. 15# underlayment on roof. Provide dishwasher drain with approved air Provide adequate fireplace hearth. gap device. Install factory built fireplaces/stoves METAL VENEERS according to manufacturers instructions. Contact City Utilities Dept. to remove Terminate chimney 2' above roof or 2' conductors and/or meter. above highest point of building within 10' of chimney. Provide approved system of grounding and bonding. LIGHT AND VENTILATION ELECTRICAL Provide mechanical exhaust or window in Show location of service entrance panel bathroom and service equipment panel. rovide min. 1075 Sq. In. net free G. F. C. I. req'd. on temporary electric. area attic ventilation. Outdoor, bathroom and garage recepticles shall be protected by G. F. C. I. Provide min. Sq. In. net free area crawl space ventilation. Maximum number of recepticles permitted FOUNDATION on a G. F. C. I. circuit shall be 10 for 20 A. circuits and 7 for 15A. circuits. Min. depth of foundationbelow finished grade is 32". Refrigerators, microwaves, washers, disposal, Min. size of footer furnace and air conditioners shall be on Provide anchor bolts " @ 6' o.c. 1' from each corner. Embedded 7" in concrete and separate circuits. INSPECTIONS 15" in masonry. The following indicated inspections are Show size of basement columns. required. The owner or his agent shall contact the City Building Dept. at least 24 hrs prior to the time the inspection FRAMING -Show size of wood girder in is to be made. Provide design data for structural member Footers and Setbacks. Building sewer. Foundation. HVAC rough-in. Floor joists undersized in Plumbing rough-in. Final Building Provide double joists under parallel bearing partitions. Plumbing final. other, Provide 1" x 4" let in corner bracing, Electrical service. BOILDING FRAMING approved sheathing, or equal. Electrical rough-in. Show size of headers for openings over Electrical final 4' wide Additional Corrections. \* 2-SMOKE DETECTORS REO, FIRST FLOOR BEORGON 1 BASEMENT PRODICE 50010 WOOD BLOCKING OUER BEARING POINTS ATTIC ACCESS 70 BE IF LOCATED IN THE GARAGE The approval of plans and specifications does not permit the violation of any section of the Building Code or other City Ordinance. This addendum is attached to Permit No. 61603 and made a part there-of. DATE APPROVED OR DISAPPROVED 8-10-88 Checked by ECOON HUBER
Plan Examiner.

Checked by\_

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#### ADDENDUM NO. 2

Permit No. 01603

#### ITEM #1 STAIRWAYS

Max. R1 8¼"
Min. TR 9"
Min. ceiling ht. 6'8"
Hand rail ht. 2'6" to 2'10"

Min. 3 - stringers

#### PERMII

#### CITY OF NAPOLEON - BUILDING DEPARTMENT

6/607 255 West Riverview Avenue, Napoleon, Ohio 43545 - 419-592-4010

Permit No _		ued 3-12-38	- 1	FE	EES	BASE	PLUS	TOTAL
Job Location	620 ROM	M ORIVE	4	BUILD	ING	9.00	230.46	
Lot 91 A	SUD-DIV CAYA	address <u>UE ACRES 5 TH</u> or legal discript	3000	ELECT	RICAL	15.00	90,00	105,00
Issued By			- 13	PLUME	BING	9.00	60.00	69.00
n	AM WRIG.	tel	- 🛭	MECH/	ANICAL	18,00	37.00	
	ROHM		, <u> </u>	DEMO	17:01:			
Agent S/EB	ENACER rong out	CONS. 636-31	73 ]	DEMO	LITION			
Address R /	06559 1		(SI	ZONIN	G	5.00	,00	5.00
	SUIOHIO 4 Ise <u>RESIDEA</u>		- 🕈	SIGN				
			. X	WATER 1	AP	375.00	100	375,00
Residential	no dwelling units		X3	SEWER T	AP FEN	60,00	100	60,00
Commercial	Indust		X	TEMP	WATER	5,00	106	5.00
New_X_Add	'nAlter	Remodel	X	remp. El	-	2 PR	1241	2.60
				ADDIT		Struct.	hrs	
•	cy		-	PLA REVI		Elect.	•	. 150
Change of Occu	pancy		-	TOTA	 Al FEEG			
Estimated Cost	162, 50	50,00	-					
PLUMBING HEATING ELECTRICA 20	TE 00.	TION				EES PAID	ale	970,90
district	fot dimensions	8788		front y	d	side	yda	rear yd
max hgt	no pkg spaces	no ldg spaces	max c	OVE	petitio	n or appeal regid		date appr
	IATION: 76-10" 26-4"	24-84	9 • •	· ····································		ISEMENT IRAGE	Z 38	
Height Electrical: 20 Plumbing: 7// RA Mechanical: 60 Sign: NA type	2 BA7H A 2 BA7H	Iding Volume (for description of des	10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SERU R-J 47, CA)	Gro	30 C	2402 PECUITS PG, 18	SIE, cu. ft.
Height Electrical: 20 Plumbing: 7// RA Mechanical: 60 Sign: NA type Additional Inform	BATH ASEMENT BUT BUT BUT BATH ASEMENT BUT BUT BUT BUT BUT BUT BUT BUT BUT BU	Iding Volume (for description of the description of	iemo. po n AUNO n 2 N	SERU R-J 47, CA)	Gro	30 C	2402 PECUITS PG, 18	SIE,  SU. M.  FOR  HOT AIR PUB
Height Electrical: 20 Plumbing: 7// BA Mechanical: 60 Sign: NA type	BATH ASEMENT BUT BUT BUT BATH ASEMENT BUT BUT BUT BUT BUT BUT BUT BUT BUT BU	Iding Volume (for description of des	iemo. po n AUNO n 2 N	SERU R-J 47, CA)	Gro	30 C	2402 120175 RG, 11	SIE,  SU. M.  FOR  HOT AIR PUB
Height Electrical: 20 Plumbing: 7// RA Mechanical: 60 Sign: NA type Additional Inform	Bui  BATH  BENIENT B  Dime  mation: NEW	Iding Volume (for description of des	iemo. po n AUNO n 2 N	SERU R-J 47, CA)	Gro	30 C	2402 120175 RG, 11	SIE,  SU. M.  FOR  HOT AIR PUB

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# CITY OF NAPOLEON BUILDING INSPECTION DEPARTMENT APPLICATION FOR BUILDING PERMIT (Please print or type).

The undersigned hereby makes application for construction, installation, or alteration work as herein specified, agreeing to do all such work in strict accordance with the City of Napoleon's adopted Building Codes.

Location of project Lot	91, Anthony Wayne	Acres Sub. Cost of pr	oject/ 102,550
Owner's Name William &	Sandra Wright	Address 525 Roh	m Drive
Contractor SIEBE	MALER CONS	TRUCTTelephone No.	419/636-3173
Address R1 C			
Lot Information: (Not	required for s	iding job)	ERMIT
Lot No. 9/			ACREL SIA ADD
Zoning District	_ Lot Size 100	ft. x 237 ft. Ar	easq. ft.
Setbacks: Front 40t	_ Right Side 2	7'-0"Left Side Zo_	O Rear 100.0
Work Information:			
Residential x	Commerc	ialInd	ustrial
New Construction x	Additio	nRem	odel
Accessory Building		_ Siding Brick &	WOOD
Brief Description of V		(Spec	111c Type)
Size: Length 1618	3"Width 64-8"	No. of Stories on	e
Area: 1st Floor	sq. ft.	Basement	· ·
2nd Floor	sq. ft.	Accessory Bldg	sq. ft.
3rd Floor	sq. ft.	Other	sq. ft.
Additional Information	n:		
• •			
APPLICATION FOR PERMITING LUDING: ELEVATIONS ADDITION OR REMODELING LOCATION. ALL PLANS	S, FLOOR PLANS, G, SHOW ALL EXI:	CROSS SECTIONS AND F STING STRUCTURES AND	PLOT PLAN. IF
Date_ August 1, 1988	Applican	t's Signature e	Herry

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# APFLICATION FOR ELECTRICAL PERMIT (Please print or type)

The undersigned hereby makes application for installation or replacement of electrical equipment as herein specified, agreeing to do all such work in strict accordance with the City of Napoleon's adopted Electrical Codes. Owner's Name WILLIAM HE SANDRA WRIGHT Address SZS ROHM DR, NAPOLEON Electrical Contractor Tim Spristle & Sms Telephone No. 599-1846 Address & O BOX 545 WAP C General Contractor\_\_\_\_\_\_ Telephone No.\_\_ Location of Project ANTHONY WAYNE ACRES Cost of Project 7000, 00 Work Information: Residential Commercial Industrial Industrial New / Service Change Rewiring Additional Wiring Brief Description of Work: Size of proposed service entrance 200 Number of new circuits 30 Type of proposed service entrance\_\_\_\_\_ Underground\_ \_\_\_ Overhead\_ Require Temporary Electric 45 (Yes or No) Total Floor Area - Commercial and Industrial only \_\_\_\_\_ sq. ft Additional Information: \*Ground fault circuit interrupter protection is required on all 120-volt single phase, 15 and 20 amp. Circuits which are part of a temporary electric service: and also on bathroom, outdoor, and garage receptacles. in all dwelling units. Art. 120-8 N.E.C. Application for permit shall be accompanied by two complete sets of

plans including: Electrical layout and riser diagram. (For commercial

ate 8-9-88 Applicant's Signature Affect

and industrial work only).

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#### BUILDING INSPECTION DEPARTMENT APPLICATION FOR PLUMBING PERMIT

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The undersigned hereby makes application for the installation or replacement of plumbing work as herein specified, agreeing to do all such work in strict accordance with the lity of Napoleon's adopted Plumbing Codes. (1, 2 and 3 family dwelling unit. 620 ROHM DR wner's Name WILLIAM H. ESANORA. WRIGHT Address NAPOCEON, OH 43545 'lumbing Contractor Now DEYLEN PLBG41416 Telephone No. 592-4756 Address 116 E. ChINTON - NAPOLEO W Telephone No. Seneral Contractor Address Location of Project 620 ROHM DR (LOT 91 ANTHONY WAYEE ACRES 600 Cost of Project 7600 -Work Information: No. of dwelling units \_\_\_\_ New \_\_\_ Replacement \_\_\_\_ Addition \_\_\_\_ Brief description of work: Is water tap required VES Size 3/4" Type of Pipe COPPER Is sewer tap required Ves Size 6" Type of Pipe Pve Type of Water Distribution pipe CPVC Type of Drainage, Waste and Vent Pipe  $P V \, {f C}$ Size of main building drain  $4^{\prime\prime}$  Size of main vent pipe  $3^{\prime\prime}$ Nater closets 3 Bathtubs 2 1/2 Shower 2 Trap Size No. Trap Size Lavatories 4 1/2 Kitchen Sink / 1/2 Disposal / 1/2 Trap Size No. Trap Size Dishwasher / 1/2 Clothes Washer / 1/2 Other 2 1/2 No. Trap Size No. Trap Size COU. PORCH FUDR. All installations are subject to plumbing tests and/or inspections. LAUN SING CAUM SINIS Date 8/12/88 Applicant's Signature extends RG. 16 W. CC. 1 BASTIZITIES

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# CITY OF NAPOLEON BUILDING INSPECTION DEPARTMENT APPLICATION FOR HEATING PERMIT (PLEASE PRINT OR TYPE)

The undersigned hereby makes application for the installation, repla or alteration of a heating system or device as herein specified, agr to do all such work in strict accordance with the City of Napoleon's adopted Mechanical Code for 1, 2 and 3 Family Buildings.
Owner's Name WILLIAM H. & SAUDEA WRIGHT Address NAPOLEON, OH 43545
Contractor's Name DEYLEN PLACE HIE Address NA POLICON Tel
BUILDING INFORMATION: 592-47'56
Single Family Double Family Multiple New Construction
Addition Remodel Replacement No. of Stories /
DESCRIPTION OF WORK
Heating System - Warm Air / Hot Water Steam : Electric
Unit Heaters Unit Gas Heaters Other
Type - Gravity Forced Radiant
No. of Thermostatical Heating Zone
Hot Water - One Pipe Two Pipe Series Loop
Electric Heat - No. of Circuits Other
Total Heat Loss of Area to be Heated 39,767
Total hour book of fired to be heated
Rated Capacity of Furnace/Boiler 60,000 BT.U
Rated Capacity of Furnace/Boiler 60,000 B7.0
Rated Capacity of Furnace/Boiler 60 800 B70  No. of Furnaces No. of Hot Air Runs 25
No. of Furnaces No. of Hot Water Radiators Type of Fuel NAT. GAS
No. of Furnaces
No. of Furnaces No. of Hot Air Runs 25  No. of Hot Water Radiators Type of Fuel NAT. GAS  Heating Units Located: Crawl Space Floor Level Suspended Roof or Exposed to Outside Air Attic Other  APPLICATION FOR PERMIT SHALL BE ACCOMPANIED BY TWO COMPLETE SETS OF FINCLUDING: LOCATION OF FURNACE OR UNIT HEATERS AND SIZE AND LOCATION

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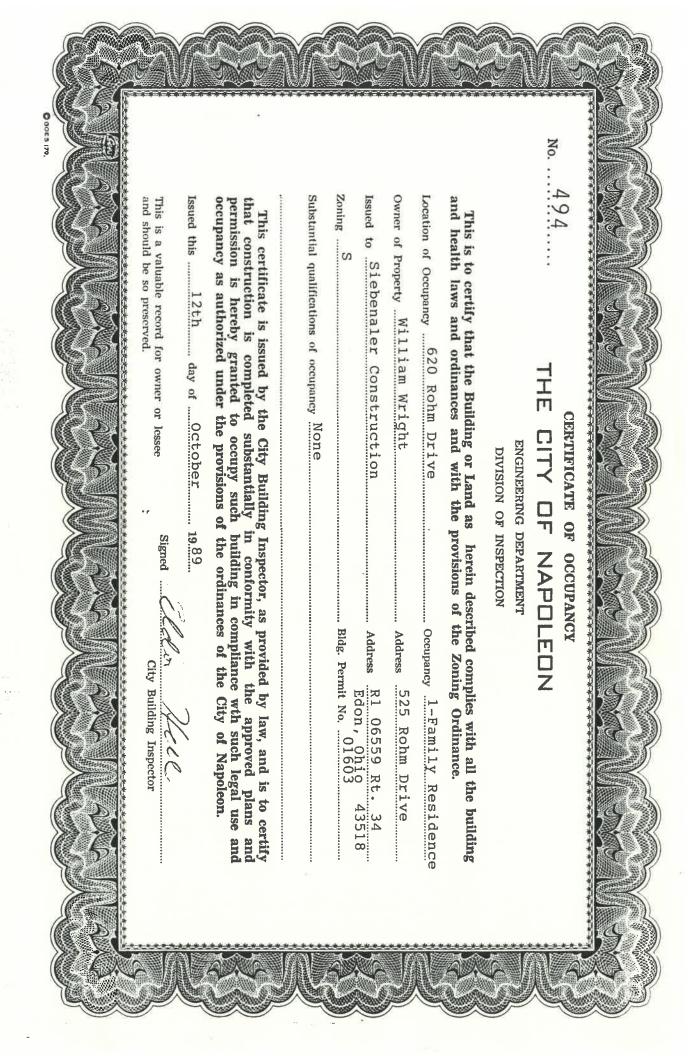
# APPLICATION FOR PLUMBING PERMIT (Please print or type)

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REU()RI)

he undersigned hereby makes application for the installation or replacement of plumbing ork as herein specified, agreeing to do all such work in strict accordance with the ity of Napoleon's adopted Plumbing Codes. (1, 2 and 3 family dwelling units only). wner's Name William Wright Address 620 Rhome Dr Lot 41 lumbing Contractor Von Doylenc Plumbing Telephone No. 592-4756 Address meneral Contractor\_\_\_\_\_\_ Telephone No.\_\_\_\_\_ Address ocation of Project\_\_\_\_\_ Cost of Project\_\_\_\_ lork Information: No. of dwelling units New Replacement Addition Prief description of work: [s water tap required\_\_\_\_\_ Size 34 Type of Pipe CPVC [s sewer tap required\_\_\_\_\_ Size\_\_\_\_ Type of Pipe\_\_\_\_PVC\_\_\_\_\_ Type of Water Distribution pipe CPUC Type of Drainage, Waste and Vent Pipe Size of main building drain 4" Size of main vent pipe 4" Water closets 4 Bathtubs 2 1/2 Shower No. Trap Size Lavatories 5 | 4 | Kitchen Sink | 12 | Disposal | 12 | Trap Size | No. Trap Size | No. Trap Size | L,7 | No. Trap Size | No. All installations are subject to plumbing tests and/or inspections. Date 8/18/88 Applicant's Signature ConDoylens Plumbing Vanil & Was yould

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# City of NAPOLEON, OHIO

255 RIVERVIEW AVENUE - (419) 592-4010 NAPOLEON, OHIO 43545-0151

August 15, 1988

Mayor Steven Lankenau

Members of Council
James Hershberger, President
Lawrence Haase
Donald Stevens
Terri A. Williams
John E. Church
Randy J. Bachman

City Manager Terry Dunn

Finance Director
Rupert W. Schweinhagen

Law Director
Michael J. Wesche

Assistant Law Director Jeffrey R. Lankenau

Siebenaller Construction R. 1 06559 Rt. 34 Edon, Ohio 43518

Re: William Wright residence 620 Rohm Drive

Napoleon, Ohio 43545

Dear Sirs:

I have completed my review of the plans submitted so far and note the following:

Item #1 I understand that two of the columns supporting the bedroom end of the house will be eliminated and that a 2 x 6 stud wall will be substituted. (NOTE: use a treated bottom plate for this wall).

Item #2 The lam. beam coat tables I have are for L.R.C. products. If you beams are to be furnished by another manufacturer submit a copy of their load tables to me with the beams you intend to use indilated.

The lam. beam over the front porch is  $3 \frac{1}{2}$ " x 12" is under designed as per L.R.C. load tables.

Furnish a 2nd set of drawings for my records.

Item #4 The basement beam supporting the dining area and kitchen 3 - 2 x 10's (span 9'tributary area 14'7", load 50# P.S.F.) is underdesigned by

approx. 12%. Let me know what you want to do to rectify this situation.

9'5PAK ONLY Item #3

BEAM INCREASED

- Item #5 Will there be a floor drain in the garage, if so it must drain into the sanitary sewer system. If not, slope the floor to the door.
- Item #6 Will there be a floor drain in the basement, if so it must drain into the sanitary sewer.
- Item #7 The following is understood from our previous conversations.
  - a. Framing lumber will be hemfir (north) #2 or better.
  - All structural headers will be
     2 2 x 12's unless noted
     otherwise on the prints.

As soon as these items are clarified, I will issue your permit, until that time do not proceed beyond completion of the foundation.

Sincerely,

Elda Her
Eldon Huber

Building Inspector

EH:skw

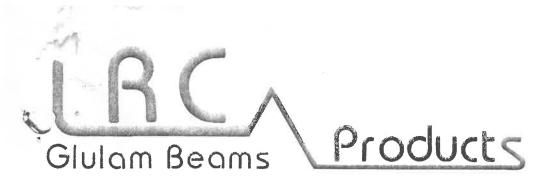
NOTE : ALC QUESTION)

NOTE : ALC QUESTION)

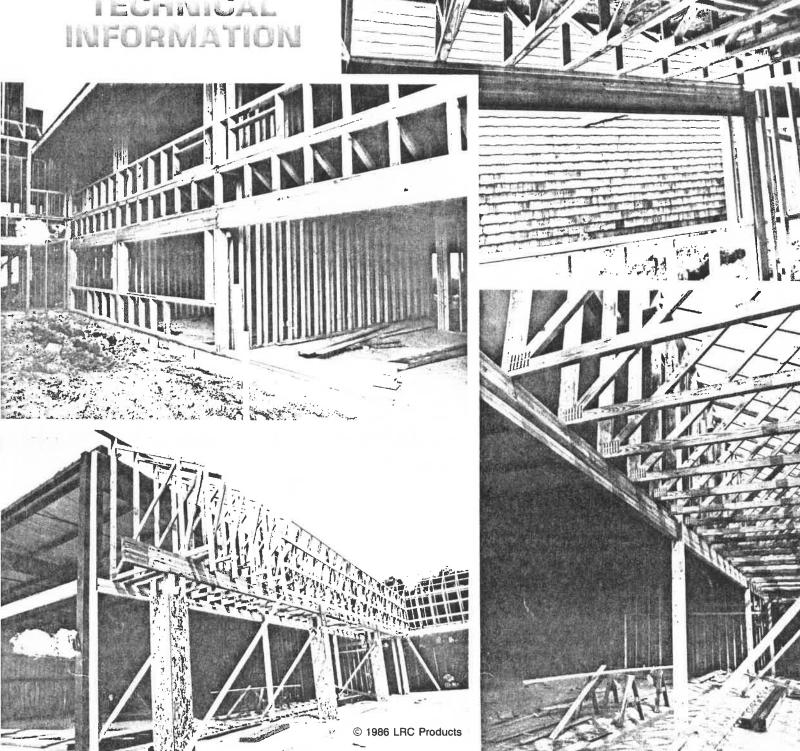
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BNSWERED VERBALLY

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SPAN TABLES



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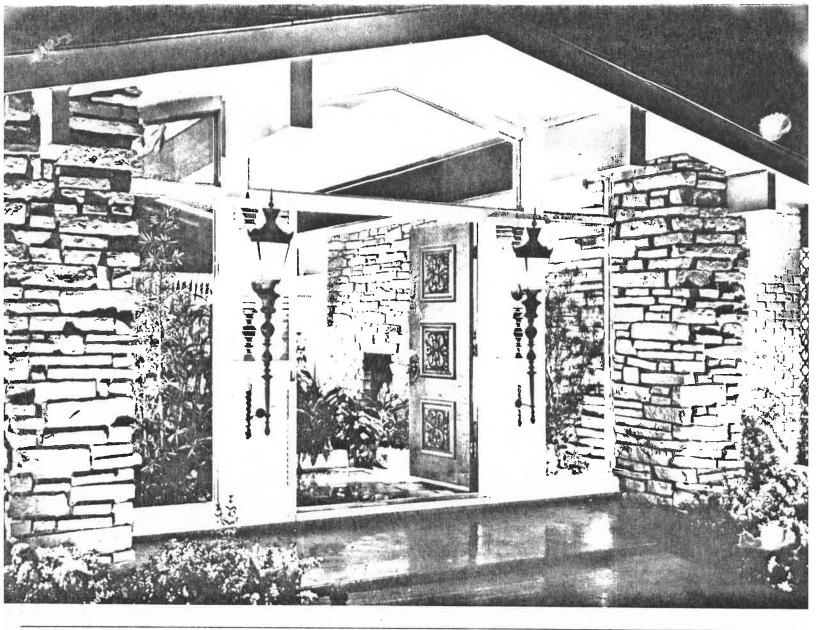


photo courtesy of SCHOLZ HOMES, INC.

### APPEARANCE GRADES

#### INDUSTRIAL GRADE

Industrial (framing) grade glulam beams are used in areas of the structure where appearance is not a primary concern. In most applications the glulam beam is concealed in the wall framing or floor framing. If the glulam beam is going to be wrapped in drywall, cedar or other material, industrial grade is recommended. Industrial grade glulam beams are as strong as architectural grade and cost less.

- 1. Laminations may possess the natural growth characteristics of the lumber grade.
- 2. Soffit and face boards shall be free of loose knots and open knot holes.
- 3. Inserts or wood fillers are not required.
- 4. Members shall be surfaced two sides only, permitting an occasional miss, low laminations and wane edge lumber.
- 5. Oversize beams such as 3 1/2" will have more skip dressing, but will be suitable for framing members.
- 6. Members are not individually wrapped unless specified.

#### **ARCHITECTURAL GRADE**

Architectural (finish) grade glulam beams are used in areas of the structure where appearance is an important requirement. Architectural grade glulam beams are used for ridge beams, rafters, roof beams and floor beams.

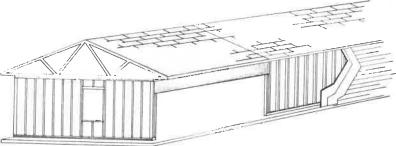
- 1. Laminations may possess the natural growth characteristics of the lumber grade.
- In exposed surfaces, knot holes and other voids measuring over 3/4 inch shall be filled by the fabricator with wood-tone
  colored filler or with clear wood inserts. When inserts are used, they shall be selected for similarity of the
  and color of the wood.
- 3. The wide face of the laminations (face board) exposed to view shall be free of loose knots. Open knot holes shall be filled.
- 4. The corners of the face board shall be eased.
- 5. The exposed three sides of the glulam beam shall be surfaced smooth. Misses are not permitted.
- 6. Members are individually wrapped with water resistant paper or opaque polyethylene.
- 7. Members have one coat of surface sealer to increase resistance to soiling, control grain raising, minimize checking and serve as a moisture retardant until a final finish is applied at the jobsite.

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#### NOW TO DETERMINE THE APPLIED LOAD IN POUNDS PER LINEAL FOOT ON GLULAWI BEAMS

When the live load, as determined by the governing building code, the dead load, the beam span, and beam spacing are known, the applied load in pounds per lineal foot can be calculated. Once the applied load in pounds per lineal foot is known, the GLULAM beam can be properly sized from the simple span uniform load beam and header tables.

A simple span beam is a beam that is supported at each end only. A uniform load is a force of equal magnitude along the full length of the beam. The following examples are simple spans and uniform loads. Use these examples to determine the applied load in pounds per lineal foot.



#### EXAMPLE #1

#### **EXTERIOR WALL HEADER SINGLE STORY STRUCTURE**

Roof live load

= 30 pounds per square foot (psf)

Roof dead load

(DL) = 17# psf

Total load

(TL) = 47# psf

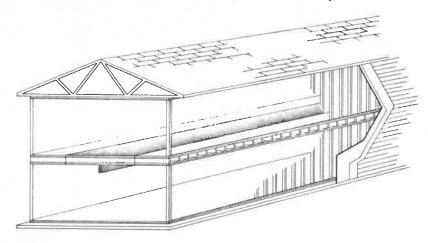
The shaded roof area indicates area of load on the header. This is the area from the center line of the roof truss to the tip of the overhang. The area of load is 15 ft. The span of the header is 12 ft.

Area of load x total load psf = load per lineal ft. (plf)

15 ft.  $\times$  47# = 705# plf

#### USE THE 3 1/2" WIDE ROOF BEAM CHART ON PAGE 6.

First find the span of 12 ft. Then go to the right until you find a value plf equal to or greater than 705# plf. In this example a 3 1/2 x 10 1/2" GLULAM roof beam has a capacity of 772# plf for a 12 ft. span.



#### **EXAMPLE #2**

#### FLOOR BEAM WITHOUT ROOF LOAD

Floor live load = 40 pounds per square foot (psf)

Floor dead load (DL) = 15# psf

Total floor load = 55# psf

The shaded floor area indicates the area of load in the floor beam. The floor area of load is 1/2 the floor joist length on each side of the beam. The floor joists are 14 ft. long on each side of the beam. The area of load is 7 ft. on each side of the beam. The total area of load is 14 ft. The span of the floor beam is 12 ft.

Floor area of load x total load psf = load per lineal ft. (plf)

 $14' \times 55\# psf = 770\# plf$ 

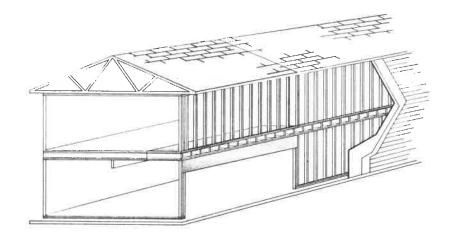
#### USE THE 5 1/8" WIDE FLOOR BEAM CHART ON PAGE 9.

First find the span of 12 ft. Then go to the right until you find a value plf equal to or greater than 770# plf. In this example a 5 1/8" x 12" glulam floor beam has a capacity of 1124# plf for a 12 ft. span.

SPECIAL NOTE: The beam tables contained in this catalogue are for simple spans. For a multiple span condition special engineering is required. A multiple span continuous basement beam size chart is on page 11.



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#### **EXAMPLE #3**

#### **EXTERIOR WALL HEADER - TWO STORY STRUCTURE**

Roof live load Roof dead load (LL) = 30 pounds per square foot (psf)

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(DL) = 17# psf

Total roof load = 47# psf

Exterior wall weight = 80# per lineal foot (plf)

Floor live load

(LL) = 40 # psf

Floor dead load

(DL) = 15# psf

Total floor load

= 55# psf

The shaded roof, wall and floor areas indicate areas of load on the header. The roof area is from the center line of the roof truss to the tip of the overhang. This area of load is 15 ft. The wall area is the wall above the beam. The floor area is 1/2 the floor joist length of 14' or 7 ft. of loaded area. The span of the header is 12 ft.

Roof area of load x total load psf = load per lineal ft. (plf)

 $15' \times 47\# psf = 705\# plf$ 

Wall area

= 80# pif

Floor area of load x total load psf = load plf

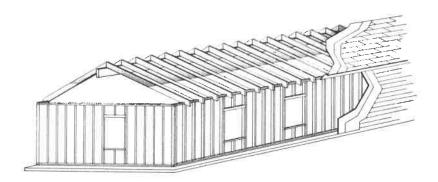
 $7' \times 55\# psf = 385\# plf$ 

Total load plf

= 1170# plf, roof, wall, floor

# DUE TO COMBINATION ROOF AND FLOOR LOADS, USE THE FLOOR BEAM SIZE CHARTS FOR 3 1/2" BEAMS ON PAGE 8, AND 5 1/8" BEAMS ON PAGE 9.

First find the span of 12 ft. Then go to the right until you find a value plf equal to or greater than 1170# plf. In this example a 3 1/2" x 15" glulam floor beam has a capacity of 1203# plf for a 12 ft. span. A 5 1/8" x 13 1/2" glulam floor beam has a capacity of 1545# plf for a 12 ft. span.



## **EXAMPLE #4**RIDGE BEAM

Roof live load

(LL) = 30 pounds per square foot (psf)

Roof dead load (DL)

(DL) = 15# psf

Total roof load

= 45# psf

The shaded roof area indicates the area of load on the ridge beam. The roof area of load is 1/2 the rafter length on each side of the ridge beam. The rafters are 14 ft. long on each side of the beam. The area of load is 14 ft. The span of the ridge beam is 20 ft.

 $F_{x}$  of area of load x total load psf = load per lineal ft. (plf)

14 x 45# psf = 630# plf

#### USE THE 5 1/8" WIDE ROOF BEAM CHART ON PAGE 7.

First find the span of 20 ft. Then go to the right until you find a value plf equal to or greater than 630# plf. In this example a 5 1/8 x 15" glulam roof beam has a capacity of 720# plf for a 20 ft. span.

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# ROOF BEAM SPAN TABLES

### 3 1/8" ARCHITECTURAL GRADE

SPAN				BEAM	DEPTHS			
FEET	6''	71/2''	9"	101/2"	12"	131/2"	15''	161/2"
6	945 S	1244 S	1576 S	1947 S	2365 S	2839 S	3380 S	4006 5
7	651*	1026 S	1288 S	1574 S	1890 S	2239 S	2626 S	3060 5
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 5
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*	590*	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				36*	57*	84*	118*	160*

#### 3 1/2" INDUSTRIAL GRADE

			3 1/2	INDUSTRIA	IL GRADE			
SPAN FEET	6''	7 <i>1</i> /2''	9''	BEAM 10½"	DEPTHS	13½"	15"	161/2''
6	1058 S	1393 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	1356 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
<del>&gt;&gt;</del> 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*

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## ROOF BEAM SPAN TABLE

#### 5 1/8" ARCHITECTURAL GRADE and 5 1/8" INDUSTRIAL GRADE

SPAN FEET	9"	101/2''	12"	13½"	B E A M 15"	DEPTHS	4011	404/11		
6	2585 S	3195 S	3880 S	4657 S		16½"	18''	191/2"	21"	221/2''
7	2113 S	2584 S	3101 S		5546 S	6571 S	7768 S	9183 S	10880 S	12956 S
8	1786 S	2168 S	2582 S	3673 S	4309 S	5020 S	5820 S	6728 S	7764 S	8961 S
9	1547 S	1867 S		3032 S	3522 S	4060 S	4652 S	5306 S	6033 S	6846 S
10	1234*	1639 S	2211 \$	2580 S	2978 S	3407 S	3873 S	4379 S	4932 S	5537 S
11	924*		1933 S	2245 S	2578 S	2935 S	3317 S	3727 S	4169 S	4647 S
12	709*	1440 B	1716 S	1987 S	2273 S	2576 S	2899 S	3243 S	3610 S	4002 S
13	-	1131*	1543 S	1781 S	2032 S	2296 S	2575 S	2870 S	3182 S	3514 S
	556*	887*	1324 B	1614 S	1836 S	2070 S	2315 S	2573 S	2844 S	3131 S
14	443*	708*	1061*	1426 B	1675 S	1884 S	2103 S	2331 S	2571 S	2823 S
15	358*	573*	860*	1229*	1515 B	1729 S	1925 S	2131 S	2345 S	2569 S
16	293*	470*	706*	1010*	1329 B	1593 B	1776 S	1962 S	2156 S	2357 S
17	242*	389*	586*	839*	1155*	1409 B	1647 S	1817 S	1994 S	2177 S
18	202*	326*	491*	704*	970*	1254 B	1480 B	1693 S	1855 S	2023 S
19	170* .	275*	416*	596*	822*	1099*	1326 B	1545 B	1733 S	1888 S
20	144*	234*	354*	509*	702*	939*	1195 B	1392 B	1603 B	1770 S
21	123*	200*	304*	437*	604*	808*	1054*	1260 B	1451 B	1655 B
22	106*	173*	262*	378*	523*	700*	914*	1146 B	1320 B	1506 B
23	91*	149*	228*	329*	455*	610*	797*	1017*	1206 B	1375 B
24	79*	130*	199*	287*	399*	535*	699*	893*	1105 B	1261 B
25	68*	114*	174*	252*	351*	471*	616*	787*	987*	1160 B
26	60*	99*	153*	223*	310*	416*	545*	697*	875*	1070 B
27		87*	135*	197*	274*	370*	484*	620*	778*	961*
28		77*	120*	175*	244*	329*	432*	553*	695*	859*
29		68*	106*	156*	218*	294*	386*	496*	623*	770*
30		60*	94*	139*	195*	264*	347*	445*	560*	693*
31			84*	124*	175*	237*	312*	401*	505*	626*
32			75*	112*	158*	214*	282*	363*	457*	566*
33			67*	100*	142*	193*	255*	329*	415*	514*
34			60*	90*	128*	175*	231*	298*	377*	
35			54*	81*	116*	159*	210*	272*	343*	468* 426*
36	1			73*	105*	144*	192*	248*		
37	1			66*	95*	131*	175*		313*	390*
38				60*	87*	120*		226*	287*	357*
39	1		-	54*	79*		160*	207*	263*	327*
40	<del> </del>			54"		109*	146*	190*	241*	301*
41	<del>                                     </del>				72*	100*	134*	174*	222*	277*
42	1				65*	91*	123*	160*	204*	255*
	-				59*	83*	112*	147*	188*	235*
43	<del>                                     </del>				54*	76*	103*	136*	173*	217*
44	<del>                                     </del>					70*	95*	125*	160*	201*
45						64*	87*	115*	148*	186*

#### **ROOF BEAM TABLE SPECIFICATIONS**

These tables apply for uniform loads and simple spans which are laterally supported. The ends of beams must be restrained against rotation. For conditions other than simple spans and uniform loading, special engineering is required. Roofs should have a minimum slope of 1/4" per foot to avoid pounding of water.

#### **DESIGN VALUES**

- a. Bending Stress, F<sub>b</sub> = 2400 psi
- b. Shear Stress,  $F_V = 165 \text{ psi}$
- c. Modulus of Elasticity, E = 1,800,000 psi
- Design values F<sub>b</sub> and F<sub>v</sub> have been increased 15% for short term duration of loading for roof beams.
- Resign value Fb has been reduced for size factor CF.
  - f. Deflections have been limited to 1/240 span for total load for roof beams.
  - g. Maximum capacity per lineal foot limited by S = Shear Stress, B = Bending Stress, \* = Deflection.
  - h. Load values are for applied loading. The weight of the beam has been deducted from load carrying capacity.

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## FLOOR BEAM SPAN TABLES

### 3 1/8" ARCHITECTURAL GRADE

6PAN				BEAM	DEPTHS			
FEET	6''	71/2''	9''	101/2''	12"	131/2''	15''	161/2"
6	689*	1079 S	1367 S	1690 S	2052 S	2464 S	2934 S	3477 S
7	432*	848*	1117 S	1366 S	1640 S	1943 S	2279 S	2655 S
8	288*	566*	944 S	1146 S	1365 S	1603 S	1863 S	2147 S
9	200*	395*	687*	987 S	1169 S	1364 S	1574 S	1801 S
10	145*	287*	499*	795*	1021 S	1186 S	1363 S	1551 S
11	107*	214*	373*	595*	892*	1049 S	1201 S	1361 S
12	82*	163*	285*	456*	684*	941 S	1073 S	1213 S
13	63*	127*	223*	357*	536*	766*	970 S	1093 S
14	49*	100*	177*	284*	427*	611*	842*	995 S
15	39*	80*	142*	229*	346*	495*	682*	911*
16	31*	65*	116*	187*	283*	406*	560*	748*
17	25*	53*	95*	155*	234*	337*	465*	621*
18		44*	79*	129*	196*	282*	389*	521*
19		36*	66*	108*	165*	238*	329*	441*
20		30*	56*	92*	140*	202*	281*	376*
21		25*	47*	78*	120*	173*	241*	323*
22			40*	67*	103*	149*	208*	279*
23			34*	57*	89*	129*	180*	243*
24			29*	49*	77*	112*	157*	212*
25			25*	43*	67*	98*	138*	186*
26			21*	37*	58*	86*	121*	164*
27				32*	51*·	76*	107*	145*
28				28*	45*	67*	94*	128*
29				24*	39*	59*	84*	114*
30				21*	34*	52*	74*	102*

#### 3 1/2" INDUSTRIAL GRADE

SPAN FEET	6"	71/2''	9"	BEAM 101/2"	D E P T H S 12"	13½"	15"	161/2"
6	772*	1209 S	1532 S	1893 S	2299 S	2760 S	3287 S	3895 S
7.	484*	950*	1252 S	1531 S	1837 S	2177 S	2554 S	2975 S
8	323*	634*	1058 S	1284 S	1529 S	1796 S	2087 S	2406 S
9	225*	443*	770*	1106 S	1309 S	1528 S	1764 S	2018 S
10	162*	321*	559*	891*	1144 S	1329 S	1527 S	1738 S
11	121*	240*	418*	667*	999*	1176 S	1346 S	1526 S
12	92*	183*	320*	512*	767*	1054 S	1203 S	1359 S
13	71*	143*	250*	401*	601*	859*	1087 S	1225 S
14	56*	113*	199*	319*	479*	686*	944*	1115 S
15	44*	90*	160*	257*	388*	555*	765*	1021*
16	35*	73*	130*	210*	318*	455*	628*	839*
17	29*	60*	107*	174*	263*	378*	521*	697*
18		49*	89*	145*	220*	316*	437*	585*
19		41*	75*	122*	185*	267*	370*	495*
20		34*	63*	103*	157*	227*	315*	422*
21		29*	53*	88*	135*	195*	270*	363*
22			45*	75*	116*	168*	233*	314*
23			39*	65*	100*	145*	203*	273*
24			33*	56*	87*	127*	177*	238*
25			28*	48*	75*	111*	155*	209*
26			24*	42*	66*	97*	136*	184*
27				36*	58*	85*	120*	163*
28				32*	51*	75*	106*	145*
29				28*	45*	67*	95*	129*
30				24*	39*	59*	84*	115*

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## 5 1/8" ARCHITECTURAL GRADE and 5 1/8" INDUSTRIAL GRADE

SPAN FEET	9"	101/2''	12"	131/2"	B E A M 15"	DEPTHS		L GRADE		
6	2244 S	2773 S	3368 S	4042 S		16½"	18"	191/2''	21"	221/2''
7	1834 S	2242 S	2691 S	3188 S	4814 S	5704 S	6743 S	7971 S	9445 S	11248 S
8	1550 S	1881 S	2240 S	2631 S	3740 S	4357 S	5052 S	5839 S	6739 S	7778 S
9	1128*	1620 S	1918 S	2238 S	3057 S	3523 S	4037 S	4605 S	5236 S	5942 5
10	819*	1305*	1676 S	1947 S	2583 S	2956 S	3360 S	3800 S	4279 S	4805 8
11	613*	978*	1464*	1723 S	2237 S	2546 S	2877 S	3233 S	3617 S	4032 \$
12	469*	750*	1124*	1725 S	1971 S	2235 S	2515 S	2813 S	3131 S	3472 5
13	367*	587*	881*	1259*	1762 S	1991 S	2233 S	2489 S	2760 S	3048 5
14	291*	467*	702*	1005*	1592 S	1795 S	2007 S	2231 S	2467 S	2715 9
15	235*	378*	568*	814*	1382*	1633 S	1823 S	2021 S	2229 S	2448 5
16	191*	309*	466*	667*	1121*	1496*	1669 S	1847 S	2033 S	2228 S
17	158*	255*			920*	1229*	1539 S	1701 S	1869 S	2044 8
18	131*	213*	386*	554*	764*	1021*	1330*	1575 S	1728 S	1887 S
19	110*	179*	272*	464*	641*	857*	1117*	1424*	1607 S	1753 S
20	93*	152*	231*	392*	542*	726*	946*	1207*	1502 S	1636 S
21	78*	129*		334*	462*	619*	808*	1032*	1293*	1534 \$
22	67*	111*	198*	286*	397*	532*	695*	888*	1113*	1373*
23	57*	95*	170* 147*	247*	343*	460*	602*	769*	965*	1191*
24	49*			214*	297*	400*	524*	670*	841*	1039*
25	42*	82* 71*	128*	186*	260*	350*	458*	587*	737*	911*-
26	36*	62*	111*	163*	228*	307*	403*	517*	649*	803*
27	30	54*	97*	143*	200*	271*	356*	457*	575*	711*
28	-	47*	85*	126*	177*	240*	315*	405*	510*	632*
29		41*	75*	111*	157*	213*	281*	361*	455*	564*
- 30			66*	98*	139*	190*	250*	322*	407*	505*
31	-	36*	58*	87*	124*	169*	224*	289*	365*	453*
32			51*	77*	111*	152*	201*	260*	328*	408*
33	<b></b>		45*	69*	99*	136*	181*	234*	296*	369*
34			40*	61*	89*	122*	163*	211*	268*	334*
35			35*	55*	79*	110*	147*	191*	243*	303*
36			31*	49*	71 *	99*	133*	173*	220*	275*
37	-			43*	64*	89*	120*	157*	200*	251*
				39*	57*	81*	109*	143*	183*	229*
38				34*	52*	73*	99*	130*	167*	209*
39 40				31*	46*	66*	90*	119*	152*	191*
					42*	60*	82*	108*	139*	175*
41			-		37*	54*	74*	99*	127*	161*
42					33*	49*	68*	90*	117*	148*
43					30*	44*	62*	82*	107*	136*
44						40*	56*	75*	98*	125*
45	<u> </u>					36*	51*	69*	90*	115*

#### FLOOR BEAM TABLE SPECIFICATIONS

These tables apply for uniform loads and simple spans which are laterally supported. The ends of beams must be restrained against rotation. For conditions other than simple spans and uniform loading, special engineering is required.

#### **DESIGN VALUES**

- a. Bending Stress  $F_b = 2400 \text{ psi}$
- b. Shear Stress  $F_v = 165 \text{ psi}$  c. Modulus of Elasticity, E = 1,800,000 psi
- d. Design value  $F_b$  has been reduced for size factor  $C_F$
- ections have been limited to 1/360 span for total load for floor beams.

  Aximum capacity per lineal foot limited by S = Shear Stress, B = Bending Stress, \* = Deflection
- g. Load values are for applied loading. The weight of the beam has been deducted from load carrying capacity.

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## GARAGE DOOR HEADER SIZE CHART

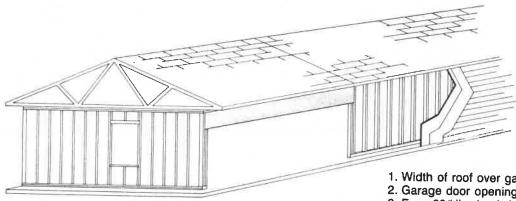
## 30# LIVE LOAD + 17# DEAD LOAD = 47# TOTAL LOAD

	TRUSS OR RAFTER SPAN INCLUDING OVERHANG										
	22'	24'	26'	28'	30'	32'	34'	36'	38'	40'	
16' DOOR	3½ x 12	3½ x 12	3½ x 13½	3½ x 13½	3½ x 13½	3½ x 13½	3½ x 15	3½ x 15	3½ x 15	3½ x 15	
18' DOOR	31/2 x 131/2							3½ x 16½			

### 40# LIVE LOAD + 17# DEAD LOAD = 57# TOTAL LOAD

	TRUSS OR RAFTER SPAN INCLUDING OVERHANG										
	22'	24'	26'	28'	30'	32'	34'	36'	38'	40'	
16' DOOR	3½ x 13½	3½ x 13½	31/2 x 131/2	3½ x 15	3½ x 15	3½ x 15	3½ x 16½	3½ x 16½			
18' DOOR	3½ x 15	3½ x 15	3½ x 15	3½ x 16½	3½ x 16½		5 1/8 x 15				

- 1. To be used for single story structures.
- 2. Design values: bending stress  $F_b = 2400$  psi, shear stress  $F_v = 165$  psi, modulus of elasticity E = 1,700,000 psi.
- 3. Design values  $F_b$  and  $F_v$  have been increased 15% for short term duration of loading. 4. Deflections have been limited to 1/180 span for total load for roof beams.





- 1. Width of roof over garage including overhang = 26'-0".
- 2. Garage door opening width = 16'-0".
- 3. From 30# live load size chart size required =  $3.1/2 \times 13.1/2$ . From 40# live load size chart size required =  $3 \frac{1}{2} \times 13 \frac{1}{2}$ .

# Do Your Garage Door Headers Sag?

## Strength Comparison Chart for 2 x 12's vs. Laminated Garage Door Headers

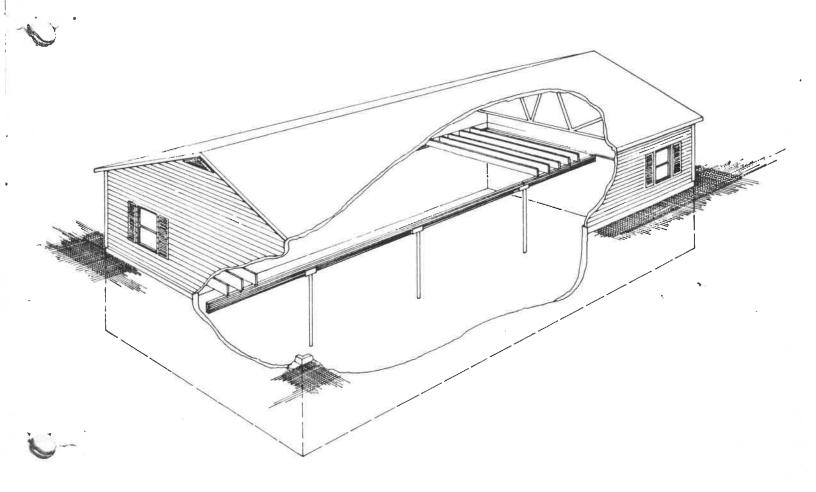
16' DOOR OPENING								
TRUSS SPAN INCLUDING OVERHANG	LOAD per Lin. Ft. on HEADER 47# per Sq. Ft.	SAFE CAPACITY (2)-2 x 12-1600f	SAFE CAPACITY (3)-2 x 12-1600f	RECOMMENDED HEADER SIZE	SAFE CAPACITY RECOMMENDED HEADER SIZE			
26'	611# Lin. Ft.	302# Lin. Ft.	453# Lin. Ft.	3½ x 13½	764# Lin. Ft.			
32'	752# Lin. Ft.	302# Lin. Ft.	453# Lin. Ft.	3½ x 13½	764# Lin. Ft.			

18' DOOR OPENING									
TRUSS SPAN INCLUDING OVERHANG	LOAD per Lin. Ft. on HEADER 47# per Sq. Ft.	SAFE CAPACITY (2)-2 x 12-1600f	SAFE CAPACITY (3)-2 x 12-1600f	RECOMMENDED HEADER SIZE	SAFE CAPACITY RECOMMENDED HEADER SIZE				
26'	611# Lin. Ft.	238# Lin. Ft.	357# Lin. Ft.	3½ x 15	745# Lin. Ft.				
32'	752# Lin. Ft.	238# Lin. Ft.	357# Lin. Ft.	3½ x 16½	901# Lin. Ft.				



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### EASEMENT BEAMS



### **BASEMENT BEAM SIZE CHART**

	HOUSE WIDTH									
BEAM	24'	26'	28'	30,	32,	34'	36;			
SIZE	SIZE MAXIMUM COLUMN SPACING									
5 1/8 x 9	9'-6"	9'-0''	8'-6''	8'-6"	8'-0"	8'-0''	7'-6''			
5 1/8 x 10½	11'-0''	10'-6''	10'-0''	10'-0''	9'-6''	9,-0,,	9'-0"			
5 1/8 x 12	12'-6''	12'-0''	11'-6''	11'-0''	11'-0''	10'-6''	10'-0"			

- 1. Size chart based on multiple span continuous beams with uniform loads.
- 2. For single story construction without interior load bearing walls.
- 3. Design load of 40# psf live load, 10# psf dead load, 50# psf total load.
- 4. Deflections have been limited to 1/360 span for total load for floor beams.
- 5 Design values: bending stress  $F_b = 2400$  psi, shear stress  $F_V = 165$  psi, modulus of elasticity E = 1,800,000 psi.

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## FIRE SAFE

#### **HEAVY TIMBER CONSTRUCTION**

Heavy timber construction implies construction with massive wood members. In such construction, though the surface of a wood member may char during exposure to fire, the surface char acts as insulation. The strength of wood is such that it continues to support its load, so the chance of building collapse is greatly diminished.

To receive building code acceptance as heavy timber construction, limitations are placed on the minimum size and thickness of all load carrying wood members. For more detailed information see AITC 108-80 STANDARD FOR HEAVY TIMBER CONSTRUCTION published by the American Institute of Timber Construction and the local building code.

Building code acceptances hold great promise for simplifying construction practices while providing fire protection. Performance of heavy timber construction under fire conditions is markedly superior to most unprotected "non-combustible" (metal) structures. There are no concealed spaces where the flames can spread, so fire fighting is simpler and safer. Firemen, who have long experiences with wood's structural integrity under fire conditions, can predict more accurately how long timber will carry its load. This enables them to stay in or on the building to combat the fire.

#### ONE HOUR FIRE RATING

One hour fire ratings for exposed glulam beams can be achieved. By oversizing the glulam beam in the original design, the required size remains after a 1 hour burn period. This procedure is detailed in "CALCULATION OF FIRE RESISTANCE OF GLUED LAMINATED TIMBERS," TECHNICAL NOTE No. 7 published by the American Institute of Timber Construction.

## PRECAUTIONS

- 1. Glulam Beams are manufactured from kiln dried lumber. Proper protection must be provided by the customer.
- 2. Architectural Grade glulam beams are wrapped for protection during shipment. If the paper has been torn or partially removed during storage and erection, it should be repaired, replaced, or completely removed.
- 3. The customer is responsible for the protection of all glulam beams after delivery.
- 4. If the glulam beams are to be stored before use, they should be placed on blocks well off the ground and individual members should be separated by strips so that air may circulate around all four (4) sides. The top and sides of storage piles should be covered with a moisture resistant material. Polyethylene films should not be used.
- 5. Claims for damage resulting from improper storage and handling will not be allowed.
- 6. Heat should not be fully turned on immediately after the structure is enclosed; otherwise, excessive checking may occur.

  A gradual seasoning period at moderate temperature increases should be provided. The building relative humidity should be reduced gradually.
- 7. To further prevent surface checking, it is recommended that all glulam beams be given 2 coats of varnish or like kind finish. Gloss, semi-gloss and flat finishes are available from your paint dealer.

LRC Products (Laminated Rafters Corp.) is one of the oldest companies in the laminated beam business. Since 1947, quality and service have been our prime objectives. Our product line consists of laminated beams with related items such laminated beam specialists. We can fill all laminated beam requirements for residential, industrial and commercial construction.

IN-STOCK and LRC Custom Beams are sold by

## LRC Products

P.O. Box 706 • Warsaw, Indiana 46580 Ohio, Michigan, Illinois, Kentucky (800) 348-2326 All Others Call Collect (219) 267-6561



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		P.

WHAT TYPE OF BEAM FOR

23-7" SPAN CARRIES FIRST FLOOR

2x6 WOOD STOO WALC

? GARAGR FLOOR DRAIN

? BASEMENT FLOOR ORAIN

X BASENENT DEAM UNDERDRSIENRO

XZNO SET OF PRINTS

J PRODION COAD TABLES FOR LAW BEAUS

PROVIOR AN ENGINERS DESIGN FOR THE

BED ROOM WINDOWS OK

# LAN BEAMS

PORCH

607 A019

ock

LPC prod

24

100F CEILING LOADS = 20+10+ 10+10=50 #x 201 = 1000 # P.L.F.

SPAN 13-104

6ARAGE 1814 5 = 231 X 50 = 1150#

SPAN 23-81/211

GARAGE DOOR HEADER

23-81/211 - 2 = 11.85 × 1150#= 13,627#

NOTE 14,000 # HANGER OK

FY (RE 2357 X 16 = 37,712 \$ 12 FOR (90 COAD = 18,856 # DEAM OK

W 5 & 3 - 8 2 C. L.

RAFTRA OK ZX65 GUER GARAGR FLOOR JOHT) OK FLOOR BRAW 3-2×105 HAM FIR 1242 = fl 5= 64,17 × 1242= 79,689 MAX 5h 106,269 MAX fb 4-2x65 5 PAN= 8' CONT ARM= 6,5 + 7-4= 13-911 13,75'X 50# = 687,5 688 × 8 × 8 × 12 = 66,048 ACT 5

BRAM OK

CONT ARNA=

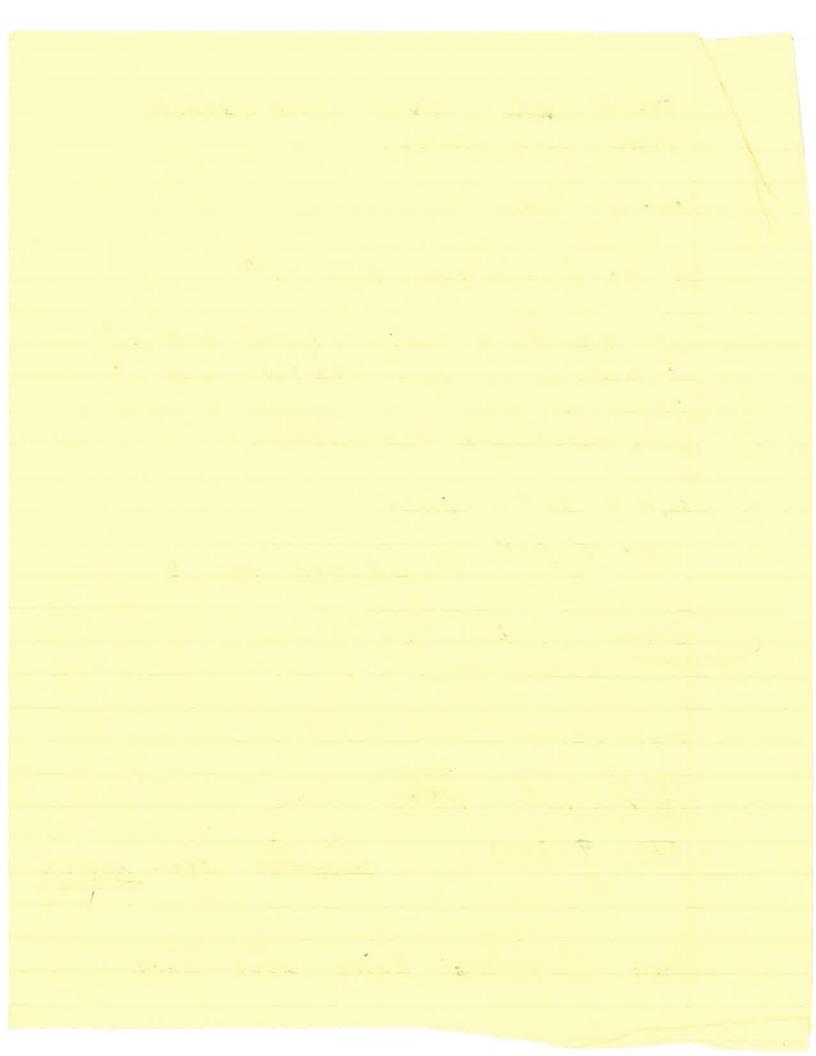
1771 x 50 # = 804 SPAN = 91

734 864× 8×9×12

89,181

107, 406 BONN NOTOK

NOTE 4- 2×10 WOOLD MEET (O.DE



## TAPPING PERMIT

Office of Water Works Napoleon, Ohio

No. W-529-88	Date 8-12-68
Received of WICCIAM WEIGH	7
THEIL HUDRIDY EULDY FIVE	
Charge for tapping permit to supply water se	rvices to Lot No.
Addition AUTHORY WAVE ACK	ers 5 " A DO
Street No. 620 ROMM DR	
Tan Cina	Cost_co ==
Plumber 1100 OLICOU. PC 4 117	
	//
Clerk-T	reasurer
Date completed 1-30-18 Service	#8827
Tell delinette	
Water Distribution Department	

Street G20 Adhra Ar. Old No. New No. S827  St. St.  Size and Kind of Main 6" A.C. Location of Main 18% M. of M. cerb Depth of Main 14% Distance from Hydrant/Valve 443 Distance to Curb Stop from Corp. 49'  St.  St.  St.  St.  St.  St.  St.  St	Name William Wright	Size of Tap_		Date	9-30-88	
St.  Size and Kind of Main 6" A.C.  Location of Main 18" M. of M. curb  Depth of Main 4"  Distance from Hydrant/Valve  Distance to Curb Stop from Corp. 49  St.  St.	Street 620 Robin Dr.	-				
St.  Size and Kind of Main 6" A.C.  Location of Main 18" W. of M. corb  Depth of Main 4"  Distance from Hydrant/Valve 443  Distance to Curb Stop from Corp. 49  St.  St.		_				
Size and Kind of Main 6" A.C.  Location of Main 18% M. of M. curb  Depth of Main 4%  Distance from Hydrant/Valve 443  Distance to Curb Stop from Corp. 49  St.  St.	New No. 8827	=				
Size and Kind of Main 6" A.C.  Location of Main 18% M. of M. curb  Depth of Main 4%  Distance from Hydrant/Valve 443  Distance to Curb Stop from Corp. 49  St.  St.						,
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Depth of Main 44  Distance from Hydrant/Valve 443  Distance to Curb Stop from Corp. 49  St.  St.		St.	1/3		J	
Depth of Main 44  Distance from Hydrant/Valve 443  Distance to Curb Stop from Corp. 49  St.  St.	ear		100			$\circ$
Depth of Main 44  Distance from Hydrant/Valve 443  Distance to Curb Stop from Corp. 49  St.  St.	Size and Kind of Main 6"4.6	<u></u>	1		4	
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