

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK  
**CITY OF PORTLAND**

Please Read  
Application And  
Notes, If Any,  
Attached

BUILDING DEPARTMENT

**PERMIT**

Permit Number: 021271

This is to certify that Raszmann, Peter/Applicant  
has permission to Construct New 2,816sf Single Family w/ Attached 25' Garage & 5'x20' Front Porch & 12'x16'Deck  
AT 1905 Congress St Heritage Court W 4 217 A034001

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

Apply to Public Works for street line and grade if nature of work requires such information.

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

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

**OTHER REQUIRED APPROVALS**

Fire Dept. \_\_\_\_\_  
Health Dept. \_\_\_\_\_  
Appeal Board \_\_\_\_\_  
Other \_\_\_\_\_  
Department Name

*[Signature]*  
Director - Building & Inspection Services  
12/16/09

**PENALTY FOR REMOVING THIS CARD**

Peter Raszmann  
775-5141 (Fax)

Residential construction, remodeling  
design services, cabinetry

169 Clinton Street  
Portland, Maine, 04103

Lot # 4  
River's Edge  
Heritage Court  
Portland, Maine

11/12/02

page 1 of 3

**Specifications for 4 bedroom Custom house to be built at the above address**

The following specifications, along with attached construction drawings and budget page represent the description of work to be done by all parties.

**General requirements:**

1. The contractor shall provide temporary electricity for his and subcontractor's use during construction periods only.
2. Supervision: Contractor shall provide adequate supervision for his workforce and subcontractor's during construction.
3. All work shall be done in accordance with BOCA national building code.
4. Cleanup: The building shall have a final cleaning and window washing prior to the final inspection.

**Allowances:** Fixture allowances indicated in this document or the contract represent a cost allowance for said items. See attached allowance Sheet

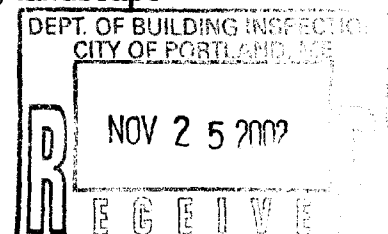
**Warranty :** Refer to the Warranty clause in the Contract. Work is warranted for one year after occupancy .

**Insurance:**The contractor will maintain insurance for protection from claims under Worker Compensation acts. The contractor will maintain general liability insurance, and builder's Risk insurance .

**Sitework:** The contractor shall clear and grub the lot to the extent necessary for construction of the building, driveway, and septic system. Tree cutting and removal shall be limited to an area 25' from the foundation and will include any dead and diseased trees that could fall and damage the structure.

**Excavation:** shall be done to a depth necessary for installation of foundation footings as indicated on plans on undisturbed earth. Backfilling will allow for natural drainage of surface water away from the building. Finished Grades shall be 12"-18" below the top of the foundations at the front and 18"-24" at the sides and rear except for daylight basement areas. Final grades sloping away from the house shall be a minimum of 5% for at least 10'. No slope will exceed 33%

**Sitework Foundation Drainage** shall consist of fabric covered perforated plastic pipe around interior and exterior at footing level covered with 3/4" stone, landscape fabric and backfilled, drained to daylight when possible.



## **Specifications**

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**Driveway:** will be constructed to be 1 shaped as per the site plan including 6" base of compacted gravel, plus Asphalt paving .  
A Front walkway shall be paved to the front steps

**Landscaping:** The contractor shall machine place a minimum of 4" of loam at all areas within 25' of the building. and over the septic system. Loam shall be hand raked, and covered with seed prior to final bank inspection (conditions permitting).  
Two trees will be planted as per site plan .

**Foundation, concrete floors :** footing shall be 8"x16" minimum. Walls shall be 7'10" high with anchorbolts 1' from all corners and spaced 6' O.C. Basement floor shall be 4" thick . Garage floor shall be 4" thick and fiberglass reinforced. Flatwork shall be power troweled and control jointed. All concrete shall be minimum of 3,000 Psi, 28 day. Foundation reinforcement shall consist of #4 rebar, two rows in the footing and two rows in the top of the foundation walls. All form ties shall be snapped and patched with plastic cement . Asphaltic foundation coating shall be applied to the exterior from the footing to the finish grade line.

**Floor;** A Center Beam for floor system 2"x12"x tripled as per plans. Steel I Beams are as specified in the plans. Floor Framing shall be 2"x10" @ 16" on center # 2 or better Spruce, Hem or fir . . Sub Floor will be 3/4" T and G Advantech installed with construction adhesive.

**Walls:** All studs will be stud grade or better Spruce, Hemlock Fir, . Exterior walls will be 2"x6" Studs @ 16" on center spacing. Basement walls will be 2"x4"x16" on center spacing. Sub siding will be 1/2" CDX or Advantech . Roof: Rafters will be 2"x10"x16" OC front and rear or as specified in the plans . Ceiling Joist will be 2"x6' 16" O.C. Ceiling strapping will be 1"x3" @16" centers will be applied to ceilings and rafters prior to drywall.

**Siding and Trim:** Siding will be Certainteed Cedar Impressions with solid PVC Trim wrapping fascia, soffit, rake, freeze boards . Tyvec or typar house wrap will be used prior to installation.

**Insulation;** ceilings shall be insulated with 12" fiberglass R 38. exterior walls shall be insulated with 6" fiberglass ( R19). A 6 mil poly vapor barrier will be installed in all exterior walls and ceilings.

**Interior Doors:** shall be prehung solid molded six panel masonite with paint grade solid jambs.

**Exterior Doors:** Exterior Doors shall be Therma Tru Premium Grade insulated fiberglass doors with compression style weatherstripping as per blueprints. each door will have a single cylinder Schlage deadbolt and entry set keyed alike .

## Specifications

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**Porches and Decks:** The rear deck is constructed of Pressure treated Yellow Pine  
The front porch is to be framed with Pressure treated 2"xstock " and covered with 3/4"x4" lpe ,with vinyl railings .  
**Windows:** sizes are described in window and door schedule:(Paradigm , Low E Argon Filled with Grids on Top and Bottom sashes .

**Drywall:** 1/2" regular drywall with three coats of tape, sanded to a smooth finish.  
Moisture resistant drywall will be used in the bath areas. 5/8" drywall wil be used on garage/ House partition walls and ceilings as required by code.

**Interior trim:**Window and door casings will be 2 1/2" colonial Casing  
Base molding will be 5 1/4" MDF Speedbase Base . Interior trim is to be painted.

**Equipment:**all appliances shall be furnished by the owner and installed with monies in the appliance budget as per the contract. The Allowance is \$400 range, refrigerator \$2000, Dishwasher \$400 ,Microwave \$300.( Total of \$3100) will be installed byappliance sales people  
**Kitchen,bath cabinets and accessories Allowance of Kit cabinets +counters= 11,050; Bath cabinet allowance of \$2,800**

**Flooring Allowance is described below ;**

Carpet: Master Br, and three other bedrooms ,

(\$15 per Yd Carpet @2.75 installed) **\$4,318**

Hardwood:1st floor(except kitchen ,2nd floor hall 600 sf Sf @7.00 sf

**(\$7,105) ( Matl 3.5 ,install 1.75, ,sand and fin 1.75).**

Sheet vinyl Kitchen 120 SF @\$8. =**\$960**

Tile ,bath 1st and second baths +laundry 140 SF @9. Sf **\$1260**

1/2" underlayment for tile and kitchen @1.80 =**\$468**

**Total flooring allowance**

**\$14,111**

**Plumbing and Heating**

Plumbing , 2 1/2 baths, one Kitchen Fixture allowance of **\$3,878**

Plumbing Cast Iron Boiler, c i Storage tank,Baseboard Heat **\$8982**

The electrical fixtures,telephone,lights,cable are itemized and described on the electrical estimate from John Perry Eledctric Inc. There is a fixture lighting allowance of **\$1,380 + \$9,500 price=\$10,880**

**Misc:** Vent stacks for baths @\$80x2 and dryer @ \$45 is the price for installing the piping and roof vents for these fixtures. represents the price to install range venting**\$300(ducting material and Labor only) =\$505**

**Garage Doors:** one Clope garage doors16"x7' with automatic garage door opener supplied by Door Services Inc. or equivalent will be installed for **\$1730** .

**Information submitted** (Continued from Page 2)

- Center for Applied Engineering, Inc., MTS Job No. 257319D, dated August 10, 1995, containing reports of flexural testing in accordance with ASTM-D790. The testing was performed on specimens that were exposed to 4,500 hours of accelerated weathering in accordance with ASTM G26. The results indicate an approximate reduction in modulus of rupture of 10 percent between product control samples and product aged samples.
- South Florida Test Service Test No. TCFI-1-X-1489, dated April 18, 1994, signed by Dennis J. Dietz, containing evidence of 4500 hours of accelerated aging.
- SGS U.S. Testing Company Inc., Report No. 117436-2, dated March 1, 1996, prepared by Steve Caldarella and William David H. Mangnall, P.E., containing reports of testing in accordance with ASTM D1929. The results indicate that the product material meets the requirements of other materials provided for in the *BOCA National Building Code/1999*, such as a light-transmitting plastic.
- SGS U.S. Testing Company Inc., Report No. 117436-2, dated March 1, 1996, prepared by Steve Caldarella and William David H. Mangnall, P.E., containing reports of testing in accordance with ASTM D1929. The results indicate that the product material meets the requirements of other materials provided for in the *BOCA National Building Code/1999*, such as a light-transmitting plastic.
- Progressive Engineering, Inc., Report No. 96-590, dated October 18, 1996, signed and sealed by Ned C. Meyers, P.E., containing results of structural load testing of the Brock Deck product. The results of this testing indicate that the guard assemblies resist the design loads required by the *BOCA National Building Code/1999* for guard assemblies, when the assemblies are installed in accordance with the manufacturer's instructions.
- Progressive Engineering, Inc., Report No. 95-2172, dated June 20, 1994, signed and sealed by Ned C. Meyers, P.E., containing results of structural load testing of the Brock Deck product. The testing determined the M.O.E of the product which was used in the calculations to determine the allowable loads in Table 1 of this report.
- Progressive Engineering, Inc., Report No. 95-356, dated October 16, 1998, signed and sealed by Evor F. Johns, P.E., containing results of structural load testing of the Hampton and Hampton XR Triple Crown Fence products. The results of this testing indicate that the guard assemblies resist the design loads required by the *BOCA National Building Code/1999* for guard assemblies, when the assemblies are installed in accordance with the manufacturer's instructions.
- Progressive Engineering, Inc., Report Nos. 95-1124, dated October 15, 1998, and 95-1890, dated January 15, 1996, signed and sealed by Ned C. Meyers, P.E., containing results of structural load testing of the Camelot, Camelot XR, Vanderbilt, and Vanderbilt XR Triple Crown Fence products. The results of this testing indicate that the guard assemblies resist the design loads required by the *BOCA National Building Code/1999* for guard assemblies, when the assemblies are installed in accordance with the manufacturer's instructions.

*This is Railing Specifications from applicator's Sales.*

- Progressive Engineering, Inc., Report 96-590, dated October 18, 1996, signed and sealed by Ned C. Meyers, P.E., containing results of structural load testing of the guard rail post mount component. The results of this testing indicate that the post mount components resist the design loads required by the *BOCA National Building Code/1999* for guard assemblies, when the post mount components are installed in accordance with the manufacturer's instructions.
- Evaluation of Deck System and Guard Rail, dated September 27, 1996, signed and sealed by Ned C. Meyers, P. E., containing calculations which determine the allowable design values indicated in Table 1 of this report, based on the deflection characteristics of the material. To account for temperature variations indicated in Table 1 of this report are the design values divided by a safety factor of 2.0.
- Report No. 01-35524.01, dated November 23, 1998, prepared by Todd D. Burroughs, on behalf of Royal Crown Limited, containing details for slip resistance testing in accordance with ASTM F1679 on a deck plank using Neolite test foot slip index of 1.0 for both dry and wet conditions of use.
- Report No. 01-35524.01, dated November 23, 1998, prepared by Todd D. Burroughs, on behalf of Royal Crown Limited, containing details for slip resistance testing in accordance with ASTM F1679 on a deck plank using Neolite test foot slip index of 1.0 for both dry and wet conditions of use.
- Report No. 01-35524.01, dated November 23, 1998, prepared by Todd D. Burroughs, on behalf of Royal Crown Limited, containing details for slip resistance testing in accordance with ASTM F1679 on a deck plank using Neolite test foot slip index of 1.0 for both dry and wet conditions of use.
- Progressive Engineering, Inc, Report No. 99-2578, dated November 1, 1999, prepared and signed by Evor F. Johns, P.E., containing results of concentrated load test on Brock Deck planks with 16 in. on center spacing of supporting members. The results of this testing indicate that the plank does not fail in shear for a concentrated load of 750 lbs applied near the support.
- Royal Group Technologies Ltd., calculations dated February 16, 2000, addressing the deflection of the Brock Deck plank under a concentrated load of 300 lbs applied at the mid-span of a 16 in. span.

**application for permit**

To aid in the determination of compliance with this research report, the following represents the minimum level of information to accompany the application for permit:

- The language "See BOCA Evaluation Services, Inc. Research Report No. 99-64" or a copy of this report;
- The following items shall be clearly shown on the construction documents:

(Continued on Page 4)

**application for permit** (Continued from Page 3)

- Manufacturer's decking member and/or guard (fencing) designation.
- On-center spacing of the supporting construction that supports the Brock Deck.
- Spacing of vertical post mount components of the guard (fence) assembly [(maximum 8 ft. (2438 mm))].
- Design calculations and details verifying the ability of the construction supporting Brock Deck and Triple Crown Fencing to carry all superimposed loads placed upon them as required by Chapter 16 of the *BOCA National Building Code/1999*. These documents shall be prepared by an individual competent and qualified in the application of the structural design principles involved. The individual shall possess the registration or license in accordance with the professional registration laws of the state in which the project is constructed.

**product identification**

Brock Deck and Triple Crown Fencing product or product containers shall be marked at the plant with the identifying language:

- "See BOCA Evaluation Services, Inc., Research Report No. 99-64."
- Additionally, Brock Deck and Triple Crown Fencing product shall be marked at the plant with the manufacturer name, part number, product name, date of manufacture, employee number and lot number of the material that was used to manufacture the product.

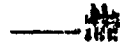


Table 1

Brock Deck Allowable Design Loads			
Deflection	Deck Span (in.)	Uniform Load (lb/ft <sup>2</sup> )	Concentrated Load (lb.)
L/180	12	448	142
	16	132	77
	18	126	60
	24	53	33
L/240	12	320	101
	16	142	60
	18	101	48
	24	40	26
L/360	12	192	61
	16	81	34
	18	63	30
	24	28	18

Notes to Table 1:

L = span of decking product, 1 in. = 25.4 mm, 1 lb/ft<sup>2</sup> = 47.88 Pa, 1 lb. = 0.453 kg

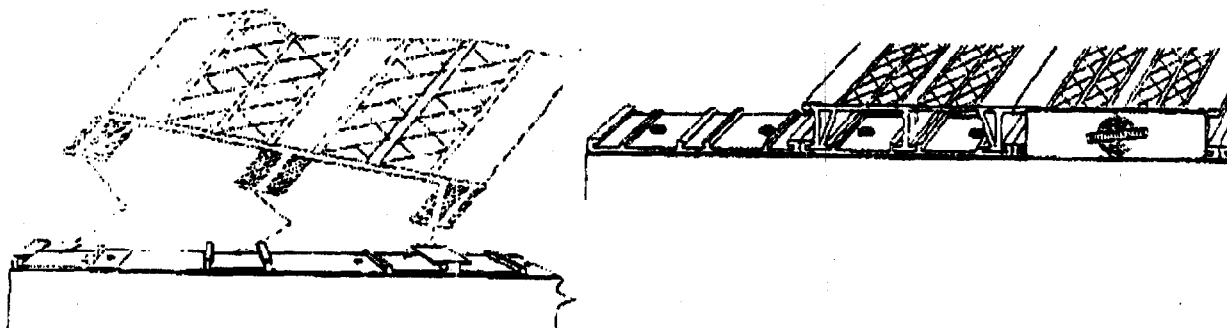


Figure 1\*

DECK and DECK CLIP COMPONENT

## BROCK DECK™ GUIDE SPECIFICATIONS

V. FORWARD UNIFORM LOADS			
DEFLECTION L/180*			
SPAN** BETWEEN STRINGERS	MAXIMUM DEFLECTION	LIVE UNIFORM LOAD* PER FT <sup>2</sup> (M <sup>2</sup> )	POINT LOAD* APPLIED AT CENTER OF TWO PLANKS
12" (305 mm)	.07" (1.78 mm)	448 lb (2187 kg)	280 lb (108 kg)
16" (406 mm)	.09" (2.29 mm)	182 lb (889 kg)	152 lb (69 kg)
18" (457 mm)	.10" (2.54 mm)	126 lb (615 kg)	120 lb (54 kg)
24" (610 mm)	.13" (3.30 mm)	53 lb (259 kg)	66 lb (30 kg)
DEFLECTION L/240*			
SPAN** BETWEEN STRINGERS	MAXIMUM DEFLECTION	LIVE UNIFORM LOAD* PER FT <sup>2</sup> (M <sup>2</sup> )	POINT LOAD* APPLIED AT CENTER OF TWO PLANKS
12" (305 mm)	.05" (1.27 mm)	320 lb (1562 kg)	200 lb (91 kg)
16" (406 mm)	.07" (1.78 mm)	142 lb (693 kg)	118 lb (54 kg)
18" (457 mm)	.08" (2.03 mm)	101 lb (493 kg)	96 lb (44 kg)
24" (610 mm)	.10" (2.54 mm)	40 lb (195 kg)	50 lb (23 kg)
DEFLECTION L/360*			
SPAN** BETWEEN STRINGERS	MAXIMUM DEFLECTION	LIVE UNIFORM LOAD* PER FT <sup>2</sup> (M <sup>2</sup> )	POINT LOAD* APPLIED AT CENTER OF TWO PLANKS
12" (305 mm)	.03" (1.78 mm)	192 lb (937 kg)	120 lb (54 kg)
16" (406 mm)	.04" (2.29 mm)	81 lb (395 kg)	68 lb (31 kg)
18" (457 mm)	.05" (2.54 mm)	63 lb (308 kg)	60 lb (27 kg)
24" (610 mm)	.07" (3.30 mm)	28 lb (137 kg)	36 lb (16 kg)
*Note: Uniform load safety factor of 2 of ultimate load. **Maximum allowable span is 24 inches (610mm)			

MAXIMUM PLANK VALUES	
UPLIFT ON PLANK	
SPAN*	ALUMINUM SNAP LOCKS
12" (305 mm)	1,116 lb/ft <sup>2</sup>
16" (406 mm)	837 lb/ft <sup>2</sup>
18" (457 mm)	744 lb/ft <sup>2</sup>
24" (610 mm)	588 lb/ft <sup>2</sup>
Note: Uplift values are based on a Clip-Strip being located at every joint. *Maximum allowable span is 24 inches (610mm)	
Unsupported overhang	4' (102 mm)



## GUARD RAIL CODE REQUIREMENTS

### Physical Dimensions

DECKS 30' ABOVE GROUND AND 50 PEOPLE OR LESS OCCUPANCY REQUIRE THE FOLLOWING:

1. Minimum railing height is 42" above deck surface.
2. Picket spacing 4" (maximum).
3. Bottom rail distance above surface 4" (maximum).

### Structural Requirements

1. 200 lb. concentrated horizontal load applied on a 1 ft. square area at any point in the system, including intermediate rails. S.B.C. Section 1608.2.2.3 BOCA Section 1615.8.2.1
2. 200 lb. concentrated load applied to the top rail at any point in any direction. S.B.C. Section 1608.2.2.1 BOCA Section 1615.8.2 UBC Table 16-B footnote 11
3. 50PLF applied horizontally or vertically upward to the top of the guard rail with a simultaneous 100PLF load applied downward to the top of the guard rail. S.B.C. Section 1608.2.2.2 UBC Table 16-B footnote 8 BOCA Section 1615.8.2
4. 25 lbs. per square foot applied horizontally to the entire guard rail, including open areas. UBC Table 16-B footnote 9
5. Force required to pass a 4" sphere through the guard rail pickets. S.B.C. Section 1015.1 UBC Section 509.3 BOCA Section 1021.3

### RAIL SYSTEM REQUIREMENTS:

- Vanderbilt, Vanderbilt XR,
1. Posts on 72" centers (maximum).
  2. 2-5/8" picket spacing.
  3. 12 ga. rail reinforcements in top and bottom rails.
  4. Post mounts.
  5. Rail locks.

Other styles may meet code requirements in specific installations. See your authorized BROCK DECK Systems dealer.

THE GUARD RAIL SYSTEMS SHOULD NOT BE USED WHERE FIRE RATED OPENING OR WALL OR ROOF ASSEMBLIES ARE REQUIRED. THE SYSTEMS TESTED WERE TESTED WITH A SAFETY FACTOR OF THREE, AS REQUIRED TO MEET OR EXCEED S.B.C., BOCA, AND UBC.

LOCAL CODES MAY VARY OR HAVE ADDITIONAL REQUIREMENTS. TESTING SERVICE-PROGRESSIVE ENGINEERING  
BOCA Test Laboratory (Research Report No. 82-68)  
ICBO Evaluation Service (Test Report No. TL-176)

To: Peter Raszmann From: Mike Nugent

Fax: 775-5141 Date: November 22, 2002

Phone: Pages: 1

Re: Lot 4 River's Edge (217 A034)

Urgent  For Review  Please Comment  Please Reply  Please Recycle



I have commenced the review of the above project and have the following comments:

- 1) What is the built up beam specifically? *OK*
- 2) Anchor bolts? *OK*
- 3) NO HAY in th perimeter drain, fabric is required. *OK*
- 4) Cellar windows? *OK*
- 5) Lally Columns? *OK*
- 6) Garage Fire rating. *OK*
- 7) Entry door sill height from garage to house *OK*
- 8) Specific type of fire door? *OK*
- 9) Headers every where *OK*
- 10) Complete stair details for all stairs (treads, risers, width, guard rails) *OK*
- 11) Spacing of joists and rafters? *OK*
- 12) Fireplace & vent product information *OK*
- 13) Net opening dimensions of egress windows *OK*
- 14) Roof covering detail *OK*
- 15) Floor/Wall/ Roof sheathing *OK*
- 16) Interior sheathing *OK*
- 17) Fastener schedule *OK*
- 18) Ridge & soffit vent dimensions *OK*
- 19) Insulation *OK*
- 20) Vapor barriers *OK*

Attached is the checklist that I use, please provide the required info.





Architecture + Design. *Wuliox*  
 Kuehligter, Goodheart - I-BEAM DATA

Peter Raszmann  
 Custom Builders  
 169 Clinton Street  
 Portland, ME 04103

**MAXIMUM ALLOWABLE UNIFORM LOADS FOR AMERICAN STANDARD I-BEAMS WITH LATERAL SUPPORT**

SPAN IN FEET

SIZE OF BEAM	WEIGHT OF BEAM PER FT.	SPAN IN FEET																	
		4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38
4 x 2 3/4	7.7 9.5	10 11	7 7	5 6															
5 x 3	10.0 11.3	16 20	11 13	8 10	6 8														
6 x 3 1/8	12.5 17.3	24 29	16 19	12 15	10 12	8 10													
7 x 3 3/4	15.3 20.0	35 40	23 27	17 20	14 16	12 15	10 13												
8 x 4	18.4 23.0	47 53	32 36	24 27	19 21	16 18	14 15	12 13											
10 x 4 3/4	25.4 35.0	80 97	54 65	41 49	33 39	27 32	23 28	20 24	18 22	16 20									
12 x 5	31.8 35.0	110 126	80 84	60 63	48 50	40 42	34 36	30 32	27 28	24 25	22 23	20 21							
12 x 5 1/4	40.8 50.0	144 168	100 112	75 84	60 67	50 56	43 48	37 42	33 37	30 34	27 31	25 28							
15 x 5 1/2	42.9 50.0	160 214	131 143	98 107	79 86	65 71	56 61	49 54	44 48	39 43	36 39	33 36	30 33	28 31	26 29	25 27			
18 x 6	54.7 70.0		196 226	147 170	118 136	98 113	84 97	74 85	66 76	59 68	54 62	49 57	45 52	42 49	39 45	37 43	35 40	33 38	31 36
20 x 6 1/4	65.4 75.0		260 281	195 211	156 169	130 140	111 120	97 105	87 94	78 84	71 77	65 70	60 65	56 60	52 56	49 53	46 50	43 47	41 45

LOADS ARE IN KIPS. 1 KIP = 1,000 POUNDS (American Institute of Steel Construction)

**MAXIMUM ALLOWABLE UNIFORM LOADS FOR WIDE FLANGE I-BEAMS WITH LATERAL SUPPORT**

SPAN IN FEET

SIZE OF BEAM	WEIGHT OF BEAM PER FT.	SPAN IN FEET																	
		4	6	8	9	10	12	14	18	20	22	24	26	28	30	32	34	36	38
8 x 5 1/4 8 x 6 1/2	17 24	47	31 46	24 35	19 28	16 23	13 20	12 17											
8 x 8 10 x 5 1/4	31 21	62	60 48	46 36	37 29	30 24	26 21	23 18	20 16	18 14	16								
10 x 8 10 x 10	33 49		74	58 88	47 73	39 31	33 52	29 46	26 40	23 36	33 30	30 28	26 26						
12 x 6 1/2 12 x 8	27 40		74	57 87	45 69	38 49	32 43	28 38	25 35	23 32	21 29	19							
12 x 10 12 x 12	53 65			108	94 117	79 98	67 84	59 73	52 65	47 59	43 53	39 49	45 45	42 42	39				
14 x 6 3/4 14 x 8	30 43		93	70 105	56 84	46 70	40 60	35 52	31 46	28 42	25 38	23 35	21 32	20 30	19 28				
14 x 10 14 x 12	61 78				123 156	102 135	88 115	77 101	68 90	62 81	56 73	51 67	47 62	44 58	41 54				
14 x 14 1/2 16 x 7	87 36		124	94	75	63	54	47	42	38	34	31	29	27	25	24	22	21	20
16 x 8 1/2 16 x 11 1/2	58 88			157	126 202	105 168	90 144	78 126	70 112	63 101	57 92	52 84	48 78	45 72	42 67	39 63	37 59		
18 x 7 1/2 18 x 8 3/4	50 64			148	119 188	99 130	85 111	74 98	66 87	59 78	54 71	49 65	46 60	42 56	40 52	37 49	35 46	33 43	31 41
18 x 11 3/4 21 x 8 1/4	96 62				224 169	189 141	176 120	154 105	137 94	123 84	112 77	103 70	95 65	88 60	82 56	77 53	72 50	68 47	65 45

LOADS ARE IN KIPS. 1 KIP = 1,000 POUNDS (American Institute of Steel Construction)