

USER'S GUIDE

TECHNICAL

DATA FOR

CCI JOISTS,

CAPLAM LVL,

AND BIG BEAM™

IJC-GLULAM

HEADERS

& BEAMS

CASCADE
CAPITAL
ENGINEERED WOOD PRODUCTS

WWW.CAPITAL-LUMBER.COM

ENGINEERED

WOOD PRODUCTS

CASCADE CAPITAL



WOOD IS GOOD

It is the earth's natural, energy efficient and renewable building material.

ENGINEERED WOOD IS A BETTER USE OF WOOD

It uses less wood to make more wood products. That's why using APA trademarked I-joists, and laminated veneer lumber, is the right thing to do.

A FEW FACTS ABOUT WOOD

We're not running out of trees. One-third of the United States land base – 731 million acres – is covered by forests. About two-thirds of that 731 million acres is suitable for repeated planting and harvesting of timber. But only about half of the land suitable for growing timber is open to logging. Most of that harvestable acreage also is open to other uses, such as camping, hiking, hunting, etc.

We're growing more wood every day. American landowners plant more than two billion trees every year. In addition, millions of trees seed naturally. The forest products industry, which comprises about 15% of forestland ownership,



Cascade Capital, Capital Lumber Company's Tacoma Distribution Facility serves Washington, Alaska, Oregon, Northern Idaho and Western Montana through a four acre asphalt covered yard and a 100,000 square foot fully enclosed warehouse. Additional specialty products, cedar, redwood, spruce, pine, fir and composite lumber are inventoried to accommodate our customers' immediate needs. For greater information on our products and suppliers please go to our Web address at www.capital-lumber.com.



is responsible for 41% of replanted forest acreage. That works out to more than one billion trees a year, or about three million trees planted every day. This high rate of replanting accounts for the fact that each year, 27% more timber is grown than is harvested.

Manufacturing wood is energy efficient. Wood products made up 47% of all industrial raw materials manufactured in the United States, yet consumed only 4% of the energy needed to manufacture all industrial raw materials, according to a 1987 study.

Good news for a healthy planet. For every ton of wood grown, a young forest produces 1.07 tons of oxygen and absorbs 1.47 tons of carbon dioxide.

Materials	Percent of Production	Percent of Energy Use
Wood	47	4
Steel	23	48
Aluminum	2	8

Wood. It's the right product for the environment.



TABLE OF CONTENTS

CCI JOISTS

PRIs – ENGINEERED TO MAKE THE JOB EASIER	6
PRI-400 – THE PERFORMANCE STANDARD	7
SAFETY AND CONSTRUCTION PRECAUTIONS	8
STORAGE & HANDLING GUIDELINES	8

CCI JOISTS

DESIGN PROPERTIES	10
ALLOWABLE FLOOR SPANS	11
ALLOWABLE FLOOR UNIFORM LOADS	12-13
ALLOWABLE ROOF UNIFORM LOADS	14-15
ALLOWABLE ROOF SPAN CHARTS	16-19
FRAMING CONNECTORS	20

CCI JOIST DETAILS

FLOOR PLAN & DETAILS	22-25
CANTILEVER DETAILS	26-27
CANTILEVER REINFORCEMENT	28
INSTALLATION NOTES	29
WEB STIFFENER REQUIREMENTS	30
FLOOR SYSTEMS	31
ROOF PLAN & DETAILS	32-34
HOLE SPECIFICATIONS	35-36
THE CODE PLUS FLOOR	37
BONUS ROOM FLOOR JOIST SELECTION GUIDE	38

CAPLAM LVL HEADERS AND BEAMS

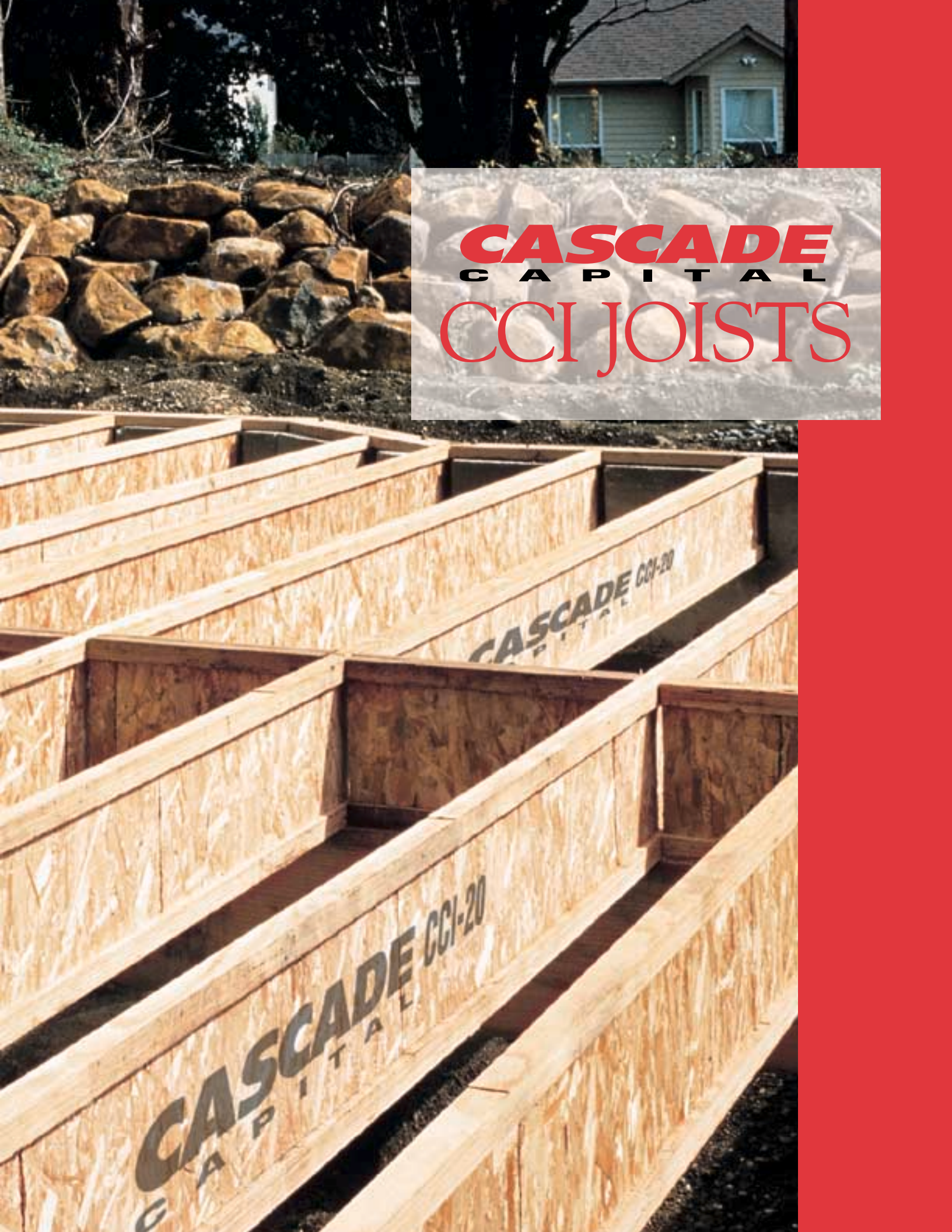
PRODUCT LINE	40
HANDLING & INSTALLATION	40
DESIGN PROPERTIES	41
BEARING DETAILS	42
BEARING LENGTH REQUIREMENTS	42
HOLE DETAILS	42
MULTIPLE-PLY BEAM ASSEMBLY	43
1.5E CAPLAM RIMBOARD	44
FLOOR BEAMS	45
1-STORY GARAGE DOOR HEADERS	46
2-STORY GARAGE DOOR HEADERS	47
1-STORY WINDOW AND PATIO DOOR HEADERS	48
2-STORY WINDOW AND PATIO DOOR HEADERS	49
ALLOWABLE FLOOR UNIFORM LOADS	50-53
ALLOWABLE ROOF UNIFORM LOADS	54-61
FRAMING CONNECTORS	62

BIG BEAMS

DESIGN PROPERTIES	64
FLOOR BEAMS	65
1-STORY GARAGE DOOR HEADERS	66
1-STORY WINDOW AND PATIO DOOR HEADERS	67
2-STORY WINDOW AND PATIO DOOR HEADERS	68
ALLOWABLE UNIFORM LOADS	69-70

SOFTWARE INFORMATION

CC-KEYBUILD SOFTWARE	71
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CCI JOISTS

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PRI_s ENGINEERED TO MAKE THE JOB EASIER

APA PRIs are the ideal choice for designers and builders who want to provide their customers with high quality floor systems. They provide consistent performance for the most demanding residential applications.

EASY TO SPECIFY Performance standardization allows specifiers to select and specify I-joists from various APA EWS member manufacturers using a single set of span tables and engineering values. Standardization also provides for increased product availability, minimizing the need for costly substitution and re-engineering.

SIMPLE TO INSTALL I-joists save builders time, and therefore money. I-joists are typically pre-cut in two-foot increments of length and shipped to the job site ready to install. This minimizes job site cutting and material waste. I-joists can be cut and fastened with traditional framing tools and fasteners – no special tools are required. In addition, Span Ratings for uniformly loaded glued-nailed residential floors for both simple and multiple span applications are clearly stamped on each APA trademarked I-joist, making them easier for builders and remodelers to install properly, and more visible for code officials to inspect. Since I-joists can typically be used at greater joist spacings as compared to lumber, fewer pieces must be cut and handled on the job site, making I-joist installation less costly and less wasteful for the builder.

ALLOW DESIGN FLEXIBILITY The availability of long lengths allows multiple span installations thus speeding construction by eliminating the need to lap joists over bearing walls or support beams. This also means fewer pieces to handle. The availability of long lengths and relatively deep joists also gives designers the freedom to create more open spaces and reduces the need for supporting walls, columns, or beams.

DIMENSIONALLY STABLE I-joists will not warp, twist, or shrink, and are more uniform in their dimensions than sawn lumber joists. The L/480 maximum live load deflection criteria of APA PRIs combined with their straightness and uniformity provides a stiffer, more uniform floor with fewer squeaks, resulting in higher customer satisfaction.

LIGHTWEIGHT Because I-joists typically weigh less than half of comparable conventional framing lumber, they can be installed quickly and efficiently.

WEB HOLES The wood structural panel webs in I-joists permit holes to be easily cut on the job site to permit the passage of electrical wiring, plumbing and ductwork. This cannot always be accomplished with sawn lumber joists and such mechanical systems must be passed under the joist system. Most I-joist manufacturers also provide knockout holes along the length of the joists to facilitate the installation of electrical wiring or light plumbing lines. These knockouts can easily be removed with a hammer as needed.

APA QUALITY ASSURED The APA-EWS trademark ensures superior I-joist quality and consistent performance. All products will be subject to the proven quality assurance program of APA.

RESOURCE FRIENDLY Wood I-joists use up to 50% less wood fiber in their production than conventional lumber joists, allowing more efficient use of our natural resources.



PRI™-400

THE PERFORMANCE STANDARD

APA – The Engineered Wood Association and its related corporation Engineered Wood Systems (EWS) have developed a “Performance Standard” for wood I-joists which is designated “PRI-400”. This standard will simplify the use of I-joist in residential floor construction.

Cascade Capital supports this effort by APA-EWS in encouraging a standard for wood I-joists and we manufacture I-joists that meet or exceed the APA-EWS Standards.

CCI joists can be directly substituted for corresponding APA-EWS PRI-400 joists. See the table for product designations to be used.

APA PRI™ – 400

Joist Depth	APA PRI-400	Cascade Capital
9½"	PRI-20	CCI 2095
9½"	PRI-30	CCI 3095
9½"	PRI-40	CCI 4095
9½"	PRI-50	CCI 5095
11⅞"	PRI-20	CCI 2011
11⅞"	PRI-30	CCI 3011
11⅞"	PRI-40	CCI 4011
11⅞"	PRI-50	CCI 5011
11⅞"	PRI-60	CCI 6011
11⅞"	PRI-70	CCI 7011
11⅞"	-	CCI 9311
14"	PRI-40	CCI 4014
14"	PRI-50	CCI 5014
14"	PRI-60	CCI 6014
14"	PRI-70	CCI 7014
14"	-	CCI 9314
16"	PRI-50	CCI 5016
16"	PRI-60	CCI 6016
16"	PRI-70	CCI 7016
16"	-	CCI 9316

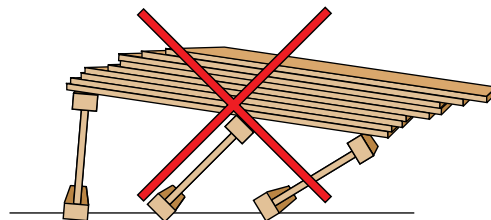
SAFETY & CONSTRUCTION PRECAUTIONS

INSTALLATION



- Walking on the joists should not be permitted until they are properly braced.
- All hangers, rim boards, rim joists and blocking at the end supports of the joists must be installed and nailed properly.
- During installation, a minimum of 1 x 4 temporary bracing is required.
- Bracing members should be spaced at 8'-0" o.c. and nailed to each joist with two 8d nails (10d box nails if bracing thickness exceeds 1").
- Lap bracing ends and anchor them to temporary or permanent sheathing nailed to the first 4' of joists at the end of the bay or a braced end wall.

- Do not cut, drill, or notch flanges.
- The ends of cantilevers must be temporarily braced on both the top and bottom flanges.
- Never overload sheathed joists with loads that exceed design loads.
- Only remove the bracing as the sheathing is attached.
- Engineered wood products should be used in dry conditions only.
- When stacking construction material, stack only over beams or walls, NOT on unsheathed joists.



These are general recommendations and in some cases, additional precautions may be required.

STORAGE & HANDLING GUIDELINES

STORAGE

- Installation guidelines from APA will be included with every shipment of trademarked APA PRIs to job sites.
- Store bundles upright on a smooth, level, well drained supportive surface.
- Always stack and handle I-joists in the upright position only.
- Bundles should not be in contact with the ground.
- Place 2x or LVL spacers (at a maximum of 10' apart) between bundles and the ground, and bundles stored on top of one another.
- Bundles should remain wrapped, strapped and protected from the weather until time of installation.

HANDLING

- All handling of joists with a forklift or crane should be done carefully.
- Joists should remain vertical during handling.
- Avoid excessive bowing during all phases of handling and installation (i.e. measuring, sawing, or placement).
- Damage may result if the joist or beam is twisted or a load is applied to it while it's lying flat.
- **NEVER USE OR FIELD REPAIR A DAMAGED I-JOIST.**