TOWN OF LINCOLN
INVITATION TO BID
LITERACY CENTER BASEMENT RENOVATIONS
RFP #2012-17

Sealed bids are due on February 21, 2012 at 10:00 am
Bid Specs are available online at:
www.lincolnri.org/departments/purchasing.asp
or can be picked up at:
Lincoln Town Hall
100 Old River Road
Lincoln, RI 02865
Hours 8:30 a.m. – 4:30 p.m.

TOWN OF LINCOLN
100 OLD RIVER ROAD
PO BOX 100
LINCOLN, RI 02865

INVITATION TO BID
LITERACY CENTER BASEMENT RENOVATIONS
12 PARKWAY, MANVILLE
RFP #2012-17

BID OPENING DATE: **TUESDAY, FEBRUARY 21, 2012**

TIME: **10:00 AM**

LOCATION: TOWN OF LINCOLN
100 OLD RIVER ROAD
LINCOLN, RI 02865

PRESENT BIDS TO: JOHN WARD, FINANCE DIRECTOR
TOWN OF LINCOLN
100 OLD RIVER ROAD
P.O. BOX 100
LINCOLN, RI 02865

PRE-BID MEETING: **FEBRUARY 10, 2012 AT 11:00 AM AT THE PROJECT LOCATION – 12 PARKWAY, MANVILLE, RI (ADDRESS FORMERLY WAS 14 CHURCH LANE, MANVILLE, RI)**

ATTENDANCE IS MANDATORY. BIDS OF CONTRACTORS NOT PRESENT OR REPRESENTED AT THE PRE-BID MEETING WILL BE REJECTED.

BID FORMS AND SPECIFICATIONS MAY BE OBTAINED ONLINE AT WWW.LINCOLNRI.ORG/DEPARTMENTS/PURCHASING/ASP OR FROM THE PURCHASING AGENT IN THE FINANCE OFFICE AT THE LINCOLN TOWN HALL, 100 OLD RIVER ROAD, LINCOLN RI, BETWEEN THE HOURS OF 9:00 A.M. AND 4:00 P.M. WEEKDAYS.

QUESTIONS MAY BE EMAILED TO RPIERCE@LINCOLNRI.ORG BY FEBRUARY 14, 2012. QUESTIONS WILL BE ANSWERED BY FEBRUARY 16, 2012.

TOWN OF LINCOLN
INVITATION TO BID
LITERACY CENTER BASEMENT RENOVATIONS
RFP # 2012-17

The Town of Lincoln, RI invites sealed bids from qualified companies for the Literacy Center Basement Renovations.

Sealed bids will be received by the Purchasing Agent until **10:00 a.m. on Tuesday, February 21, 2012** at which time they will be opened publicly and read in the Town of Lincoln Council Chambers at 100 Old River Road, Lincoln, RI. A **mandatory** pre-bid meeting will be held on **Friday, February 10, 2012 at 11:00 a.m**. The meeting will be held at the Literacy Center at 12 Parkway, Manville, RI.

Contract will be awarded immediately after approval by the Town Council on February 28, 2012. The contractor selected for the above project must be able to start the work immediately upon award of the contract. Such contract shall require the submittal of insurance certificates, the compliance with Federal, State and Local Laws and ordinances, including the payment of prevailing wages. Bid surety in the form of a bid bond or certified check in the amount of five percent (5%) of the total bid price must be submitted with each bid. The invitation to bid will be available online at www.lincolnri.org/departments/purchasing.asp or at the Purchasing Office, Town of Lincoln – Town Hall, 100 Old River Road, Lincoln, RI 02865 between the hours of 9:00 a.m. and 4:00 p.m. Two (2) copies of the submitted bids are to be placed in a sealed envelope and clearly marked **LITERACY CENTER BASEMENT RENOVATIONS** and be addressed to John Ward, Finance Director, c/o Town of Lincoln, 100 Old River Road, P.O. Box 100, Lincoln, RI 02865. No proposals will be accepted after the date and time specified. The Town of Lincoln reserves the right to accept or reject, without prejudice, any or all proposals or to waive any irregularities therein, or to accept the proposal deemed to be in the best interest of the town of Lincoln. Individuals requesting interpreter service for the hearing impaired must request such service 72 hours in advance of this scheduled opening.

John Ward – Finance Director
Town of Lincoln, RI

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LITERACY CENTER BASEMENT RENOVATIONS

TOWN OF LINCOLN
GENERAL SPECIFICATIONS

1. SUBMITTAL

Sealed bids (proposals) will be accepted in the office of the Finance Director, Town Hall, Lincoln, Rhode Island, until the time indicated on the attached advertisement for bids, for the commodities, equipment or services listed in the specifications; and will be then publicly opened and read at the prescribed time in the Town Hall Council Chambers.

2. FORM OF BID

Proposals shall be submitted on the bid form provided within the invitation to bid package. The bidder is to copy the form, fill it out, and submit it in duplicate with the 5% bid bond and the list of references.

3. SUBMISSION OF BIDS

a) Envelopes containing bids must be sealed and addressed to the Finance Director, Lincoln Town Hall, 100 Old River Road, P.O. Box 100, Lincoln, RI 02865 and must be marked with the name and address of the bidder, date and hour of opening, and name of item in bid call.

b) The Purchasing Agent will decide when the specified time has arrived to open bids, and no bid received thereafter will be considered.

c) Any bidder may withdraw his bid by written request at any time prior to the advertised time for opening. Telephone bids, amendments, or withdrawals will not be accepted.

d) Unless otherwise specified, no bid may be withdrawn for a period of thirty (30) days from time of bid opening.

e) Negligence on the part of the bidder in preparing the bid confers no rights for the withdrawal of the bid after it has been opened.

f) Proposals received prior to the time opening will be securely kept, unopened. No responsibility will be attached to an officer or person for the premature opening of a proposal not properly addressed and identified.

g) Any deviation from the specifications must be noted in writing and attached as part of the bid proposal. The bidder shall indicate the item or part with the deviation and indicate how the bid will deviate from specifications.

4. RHODE ISLAND SALES TAX

The Town is exempt from the payment of the Rhode Island Sales Tax under the 1956 General Laws of the State of Rhode Island, 44-18-30, Paragraph 1, as amended.

5. FEDERAL EXCISE TAXES

The Town is exempt from the payment of any excise tax or federal transportation taxes. The price bid must be exclusive of taxes and will be so construed.

6. QUALIFICATION OF BIDDERS

The Town may make such investigations as it deems necessary to determine the ability of the bidder to perform the work. The bidder shall furnish the Town with all such information and date for the purpose as may be requested.

7. ADDENDA AND INTERPRETATIONS

No interpretation on the meaning of the plans, specifications or other contract document will be made to any bidder orally. Every request for such interpretations should be in writing addressed to the Town of Lincoln; Office of the Finance Director, 100 Old River Road, P.O. Box 100, Lincoln, RI 02865 and to be given consideration must be received at least seven (7) days prior to the date fixed for the opening of the bids.

8. DELIVERY

All bids are to be **F**rom **O**rigin of **B**usiness to various locations within the Town of Lincoln, delivery to be supplied with the Purchase Order. No extra charges for delivery, handling or other services will be honored. Only inside delivery and set-up, where required, will be accepted. TAILGATE DELIVERIES WILL BE REFUSED. The vendor must notify the Town of Lincoln 24 hours prior to delivery. All claims for damage in transit shall be the responsibility of the successful bidder. The Town will not make payment on damaged goods, they must be replaced or adjustments made at the option of the Town. The Town of Lincoln is only represented by the Finance Director in these matters and that division, or its appointed representative or agent, shall be the only entity to negotiate any settlements. Deliveries must be made during normal working hours.

Bid price, where applicable, is to include the cost of uncrating and setting in place. Bid price, where applicable, is to include installation.

9. BID SECURITY

Each bid must be accompanied by bid security in the form of certified check, cashier's check, treasurer's check, or bid bond in the amount of five (5%) percent of the total bid.

NOTICE TO VENDORS

1. Contracts shall be awarded by the Town Council to the lowest responsible bidder. In determining "lowest responsible bidder", in addition to price, the Town Council may consider:

    - The ability, capacity and skill of the bidder to perform the contract or provide the service required;
    - Whether the bidder can perform the contract or provide the service promptly or within the time specified without delay or interference;
    - The character, integrity, reputation, judgment, experience and efficiency of the bidder;
    - The quality of performance of previous contracts or services;
    - Previous and existing compliance by the bidder with laws and ordinances relating to the contract or service;
    - The sufficiency of the financial resources and ability of the bidder to perform the contract or provide the service;
    - The quality, availability and adaptability of the supplies or contractual services to the particular use required;
    - The ability of the bidder to provide future maintenance and service for the use of the subject contract;
    - The number and scope of conditions attached to the bid.

2. No proposal will be accepted if made in collusion with any other bidder.

3. A bidder who is an out-of-state corporation shall qualify or register to transact business in this State, in accordance with RI General Laws (as amended), Sections 7-1.1-99, 7-1.1-105, and 7-1.1-106.

4. The Town of Lincoln reserves the right to reject any and all bid(s).

5. In determining the lowest responsible bidder, cash discounts for payment less than thirty (30) days will not be considered.

6. Where prices are the same, the Town of Lincoln reserves the right to award to one bidder, or to split the award.

7. Competitive prices may be obtained by all bidders attending formal bid opening. After a reasonable lapse of time, tabulation bids may be seen by applying in person at the Finance Department. Telephone or written requests for the above will not be honored.
8. As the Town of Lincoln is exempt from the payment of Federal Excise Taxes and Rhode Island Sales Tax, prices quoted are not to include these taxes.

9. In case of error in the extension of prices quoted, the unit price will govern.

10. The contractor will not be permitted to either assign or underlet the contract nor assign either legally or equitably any monies hereunder, or its claim thereto without the previous written consent of the Finance Director.

11. Delivery dates must be shown in your bid. If no delivery date is specified, it will be assumed that an immediate delivery from stock will be made.

12. A certificate of insurance shall be required of a successful vendor.

13. Bids may be submitted on an "equal" in quality basis. We reserve the right to decide equality. Bidders must indicate brand or the make being offered and submit detailed specifications if other than brand requested.

14. All vendors doing business within the Town are subject to the requirements as stated in the code of Ethics as established by the Town Ordinance No. 92-15 (9/22/92).

15. For contracts involving construction, alteration and/or repair work, the provisions of State Labor Laws concerning payment of prevailing wage rates apply. (See RI General Laws Section 37-13-1 et seq., as amended).

16. No goods should be delivered or work started without a Purchase Order.

17. The Town requests that you submit one original and one copy of your bid.

18. Compensation to the contractor for professional services shall be based upon and measured by the following elements which are set forth below:

    - The successful bidder will submit to the Town of Lincoln an invoice for each completed project no later than the 2nd week of every month. This invoice will then be added to the Town Council agenda; the council meeting is the 3rd Tuesday of every month. Following the review and acceptance of the Invoice by the Town Council, a payment will be made to the Contractor within 30 days.

    - Additional Work. If, during the performance of this Agreement, other or additional services are required for this contract, the Town may order the Contractor to perform such additional services, payment to the Contractor for the same shall be as provided above. In order to be eligible for payment for additional services, Contractor must receive, prior to commencement of work, authorization from the Town of Lincoln.

- Abandonment of Project. If the Town of Lincoln shall at any time during the performance of this Agreement, deem it necessary for the Town to abandon or involuntarily defer the work under this Agreement, the Contractor shall be entitled to compensation for any work uncompensated, work performed prior to such time. Or compensation shall be withheld if the Town deems the work performed of poor quality.

- Termination. In the event that either party shall default in its obligations to perform in accordance with this Agreement, the other party may demand, in writing to terminate this Agreement by giving 48 hours written notice.

END OF SECTION

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____, as Principal, and _____, as Surety, are hereby held and firmly bound unto the Town of Lincoln, R.I., as OWNER in the penal sum of _____ ($_____), for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed, this _____day of _____2012.

The condition of the above obligation is such that whereas the Principal has submitted to the Town of Lincoln, Lincoln Rhode Island, a certain BID, attached hereto and hereby made a part hereof to enter into a Contract in writing, for the **LITERACY CENTER BASEMENT RENOVATIONS** project.

NOW, THEREFORE,

(a) If said BID shall be rejected, or

(b) If said BID shall be accepted and the Principal shall execute and deliver a Contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and shall furnish a BOND for his faithful performance of said Contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the Agreement created by the acceptance of said BID.

Then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time with which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Notary

_____ and

Principal Seal

Surety

IMPORTANT: - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

SCOPE OF WORK

Please review the included specifications packet for the approved products to be used during project. Other products may only be used if they are approved by the Building Official. The work under the individual bid items shall consist but not limited to the following:

Bid item #1: Filling of sump hole

Remove 8" of soil from the sump hole, replace it with 4" of ½" washed crushed stone; compact stone, forcing it under the edges of the slab; clean and wash the edges of the existing slab to remove all dirt and mud; place 10 mil vapor barrier on top of the crushed stone and pour 4" of concrete to seal the hole; finish the surface to match the existing slab. Use concrete mix that provides a minimum of 3,500 psi compressive strength in 28 days.

Bid item #2: Fill hole near water tank

Remove 8" of soil from the hole, replace it with 4" of ½" washed crushed stone; compact stone, forcing it under the edges of the slab; clean and wash the edges of the existing slab to remove all dirt and mud; place 10 mil vapor barrier on top of the crushed stone and pour 4" of concrete to seal the hole; finish the surface to match the existing slab. Use concrete mix that provides a minimum of 3,500 psi compressive strength in 28 days.

Bid item #3: Remove and replace wooden platform at basement front entrance

Remove and dispose the existing stairs and platform. Remove 8" of soil from the area where no concrete slab exists; place 10 mil vapor barrier in the area, clean and wash the edges of the existing slab to remove all dirt and mud and place 4" rigid insulation on top of the vapor barrier; pour a 4" concrete slab, reinforced with welded wire fabric; finish the surface to match the existing slab.

Construct the forms for the new concrete platform and stairs as shown on the plans and pour the concrete; finish concrete surfaces as required, install handrails. Use concrete mix that provides a minimum of 3,500 psi compressive strength in 28 days for both the slab and for the stairs and platform.

Bid item #4: Renovation of former bathrooms

Remove and dispose all lumber framing in the bathroom areas. Remove 8" of soil; place 10 mil vapor barrier in the area, clean and wash the edges of the existing slab or wall to remove all dirt and mud and place 4" rigid insulation on top of the vapor barrier; pour a 4" concrete slab, reinforced with welded wire fabric; finish the slab to provide a smooth surface suitable for the installation of vinyl tiles or carpeting.

Also included in this bid item is the work in the crawl space behind the former bathrooms. Remove and dispose all lumber framing and debris in the crawl space. Parge foundation walls as needed. Remove 8" of soil; place 10 mil vapor barrier in the area, clean and wash the edges of the existing slab or wall to remove all dirt and mud and place 4" rigid insulation on top of the vapor barrier; pour a 4" concrete slab, reinforced with welded wire fabric.

Bid item #5: Build new wall

Furnish and install 3- 5/8" steel stud set in track 1"(one inch) away from existing foundation wall. Studs to be 16" on center from floor to ceiling with R-13 foil faced insulation and ¾" pressure treated plywood on storage room side. Existing windows will be framed around to meet the Town's regulations.

Bid item #6: Seal rear basement window and chimney flue.

Remove all remnants of the window and the flue; clean to sound brick or stone, fill opening with brick and mortar; finish interior and exterior to match adjacent surfaces.

Bid item #7: Dehumidifier platforms

Build two (2) platforms in the size and the locations per the Building Official directive, to support the existing dehumidifiers. Drill through the foundation and install 2" diameter PVC drains, furnish and install wiring and GFI outlets for powering the units. Plumbing and wiring shall be supplied by the contractor and be in accordance with the applicable codes and regulations. Connect the GFI outlets to the 20 AMP circuit breaker, installed in Bid Item #12.

Bid item #8: Repairs to stairway

Furnish and install handrail on the right side of the stairway, utilizing the type of supports identified in the specifications package.

Install new 4x4 pressure treated post for new structural framing member above. Use column base Simpson ABE46R or similar.

Bid item #9: Furnish and install gutter guards

Clean all gutters and downspouts repair or adjust as necessary. Install gutter guard **Leaf Relief** manufactured by **Ply Gem** on all gutters on all sides of the building.

Bid item #10: Caulk doors, windows and railing stanchions

Caulk around all exterior doors and windows including j channels. Only approved caulking may be used here. See specifications packet for approved materials.

Bid item #11: Adjust basement and bathroom door

Trim the edge of the doors to the main bathroom and at the top of the basement stairs so that they have ¼" clearance on top and on the side opposite the hinges. Prime and paint the new exposed surfaces with the approved paints.

Bid item #12: Install wall and repair work in the old furnace room

Furnish and install 3- 5/8" steel stud set in track one inch away from existing foundation wall, studs to be 16" on center from floor to ceiling. Insulate to R-13 with foil faced insulation and wallboard with 5/8" **Dens Armor Plus Abuse Resistant Interior Panels**. Tape and skim coat screw heads, joints and corners and finish to accept paint. Walls will be painted with one coat of primer and two coats of finish paint. Wall color will be picked by the Director. Use the approved **Benjamin Moore** low voc with mold resistant additive paint.

Install new 6'-8" x 34" fiber glass door with keyed lock and painted (two coats of paint). The brand of paint will need to be Benjamin Moore low voc with mold resistant additive. Doors will need to match existing doors style.

Remove and dispose existing door and frame work found in old furnace room.

Install a new 20 AMP circuit breaker for all new GFI electrical outlets at electrical panel. Add two new GFI outlets in boiler room in areas marked out on plans and wire to new 20 AMP breaker.

Bid item #13: Build new canopy for ADA ramp entry

Build a new canopy for the entrance at the ramp, duplicating the dimensions and all the details of the existing canopy on the south face of the building. The new canopy is to be securely fastened to the framing of the building, as directed by the Building Official, when the framing is exposed. The lumber material is to be Douglas fir select.

Bid item #14: Repair blue stone walkway

The work is for the walkway leading to the south entrance of the building. Remove the soil between the blue stone slabs to the depth of the slab or to 3", whichever the less. Grout by replacing the removed material with sand and compact. Adjust any stone not level or out of placement in the walk prior to the grouting. The sand shall be a mixture of 50% sand and 50% stone dust.

Bid item #15: Install new walkway at basement entry

The work is for the existing exterior walkway leading to the basement. Remove and dispose existing walkway. Careful attention should be made to the retaining wall and

stone wall on the sides of the walkway. Any damage done to the existing walls will need to be repaired to the satisfaction of the Town. Excavate to a depth of 8" and provide 4" of crushed stone for the base and 4" concrete slab, reinforced with welded wire fabric. Finish surface as indicated on plans. Use concrete mix that provides a minimum of 3,500 psi compressive strength in 28 days. Water must flow away from building, towards the asphalt, after construction of walkway.

Bid item #16: Owner's reserve

This bid item is reserved for the owner for additional work, if such work is authorized. Payment shall be issued upon the completed work, accepted in place.

REFERENCES OF SIMILAR JOBS COMPLETED

The contractor shall provide the Town of Lincoln a list of any completed jobs that are similar in type. List the project(s), location(s), and contact information for each job.

MEASUREMENT AND PAYMENT

Bid item #1: Filling of sump hole

Measurement: Filling of sump hole will be measured by the Lump Sum, complete and accepted in place.

Payment: Payment for the filling of sump hole shall be the Lump Sum bid price, which price shall be full compensation for removal of soil, the cutting and removal of concrete, the installation of gravel and vapor barrier, the placement of concrete slab patch, for concrete finish and all materials, equipment, tools, labor and incidentals necessary to complete the work as shown on the drawings.

Bid item #2: Fill hole near water tank

Measurement: Filling the hole near the water tank will be measured by the Lump Sum, complete and accepted in place.

Payment: Payment for the filling of the hole near the water tank shall be the Lump Sum bid price, which price shall be full compensation for removal of soil, the cutting and removal of concrete, the installation of gravel and vapor barrier, the placement of concrete slab patch, for concrete finish and all materials, equipment, tools, labor and incidentals necessary to complete the work as shown on the drawings.

Bid item #3: Remove and replace wooden platform at basement front entrance

Measurement: The removal of the wood entry landing and its replacement with concrete platform and stairs shall be measured by the Lump Sum, complete and accepted in place.

Payment: Payment for the removal of the wooden platform and its replacement with concrete shall be the Lump Sum bid price, which price shall be full compensation for the demolition and disposal of the existing wood structure, the removal of any soil and concrete, the furnishing and installing gravel, vapor barrier, 4” rigid insulation, formwork, furnishing and installing railing, furnishing, placing and finishing concrete and all materials, equipment, tools, labor and incidentals necessary to complete the work as shown on the drawings.

Bid item #4: Renovation of former bathrooms

Measurement: The renovations of the former bathroom areas shall be measured by the Lump Sum, complete and accepted in place.

Payment: Payment of the renovation of bathroom areas shall be by the Lump Sum bid price, which price shall be full compensation for the removal of lumber framing, for

excavation, for vapor barrier, rigid insulation and concrete slab, for all materials, equipment, tools, labor and incidentals necessary to complete the work as shown on the drawings.

Bid item #5: Build new wall

Measurement: The building of the new wall shall be measured by the Lump Sum, complete and accepted in place.

Payment: Payment for building the new wall shall be by the Lump Sum bid price, which price shall be full compensation for preparation, for furnishing and supplying lumber, metal studs, sheet rock, insulation, painting, wiring and all materials, equipment, tools, labor and incidentals necessary to complete the work as shown on the drawings.

Bid item #6: Seal rear basement window and chimney flue

Measurement: The sealing of the rear basement window and chimney flue shall be measured by the Lump Sum, complete and accepted in place.

Payment: Payment of the sealing of the rear basement window and chimney flue shall be by the Lump Sum bid price, which price shall be full compensation for preparing and closing the openings, for all materials, equipment, tools, labor and incidentals necessary to complete the work as shown on the drawings.

Bid item #7: Dehumidifier platforms

Measurement: The construction of two dehumidifier platforms shall be measured by the Lump Sum, complete and accepted in place.

Payment: Payment for constructing two dehumidifier platforms shall be by the Lump Sum bid price, which price shall be full compensation for locating and building the platforms, for the required electrical and plumbing work, for all materials, equipment, tools, labor and incidentals necessary to complete the work as shown on the plans.

Bid item #8: Repairs to stairway

Measurement: The repairs of the stairway shall be measured by the Lump Sum, complete and accepted in place.

Payment: Payment for repairing the stairway shall be by the Lump Sum bid price, which price shall be full compensation for constructing the improved supports and the handrail, for all materials, equipment, tools, labor and incidentals necessary to complete the work as shown on the plans.

Bid item #9: Furnish and install gutter guards

Measurement: Furnishing and installing gutter guards shall be measured by the Lump Sum, complete and accepted in place.

Payment: Payment for furnishing and installing gutter guards shall be by the Lump Sum bid price, which price shall be full compensation for cleaning the gutters and downspouts, for making any minor adjustment or repairs to the gutters, for furnishing and installing the guards, for all material, equipment, tools, labor and incidentals necessary to complete the work as shown on the plans.

Bid item #10: Caulk doors, windows and railing stanchions

Measurement: Caulking doors, windows and stanchions shall be measured by the Lump Sum, completed and accepted in place.

Payment: Payment for caulking doors, windows and stanchions shall be by the Lump Sum bid price, which price shall be full compensation for preparation, for all material, equipment, tools, labor and incidentals necessary to complete the work as shown on the plans.

Bid item #11: Adjust basement and bathroom door

Measurement: Adjusting the basement and bathroom doors shall be measured by the Lump Sum, completed and accepted in place.

Payment: Payment for adjusting the basement and bathroom doors shall be by the Lump Sum bid price, which price shall be full compensation for making the adjustment, for painting and for all material, equipment, tools, labor and incidentals necessary to complete the work as shown on the plans.

Bid item #12: Install wall and repair work in the old furnace room

Measurement: Installing the wall and making repairs in the old furnace room shall be measured by the Lump Sum, completed and accepted in place.

Measurement: Payment for installing the wall and making repairs in the old furnace room shall be by the Lump Sum bid price, which price shall be full compensation for all preparation and demolition, for filling hole in floor, for building new wall, for furnishing and installing new door, painting, for electric outlets and wiring, and for all material, equipment, tools, labor and incidentals necessary to complete the work as shown on the plans.

Bid item #13: Build new canopy for ADA ramp entry

Measurement: Building a new canopy for the ADA ramp entry shall be measured by the Lump Sum, completed and accepted in place.

Payment: payment for the new canopy shall be by the Lump Sum bid price, which price shall be full compensation for furnishing all materials for the canopy, for the building alterations necessary for the installation, for painting, and for equipment, tools, labor and incidentals necessary to complete the work as required.

Bid item #14: Repair blue stone walkway

Measurement: Repairs to the walkway shall be measured by the Lump Sum, completed and accepted in place.

Payment: Payment for the repairs to the walkway shall be by the Lump Sum bid price, which price shall be full compensation for the removal of soil between the stones, for adjusting stones, for furnishing and placing sand grout, for equipment, tools, labor and incidentals necessary to complete the work as required.

Bid item #15: Replace concrete walk

Measurement: The replacement of the concrete walk shall be measured by the Lump Sum, completed and accepted in place.

Payment: Payment for the replacement of the concrete walk shall be by the Lump Sum bid price, which price shall be full compensation for the removal and disposal of the existing slab, for any excavation, for furnishing and placing crushed stone base and for the new concrete walk, for all material, equipment, tools, labor and incidentals necessary to complete the work as shown on the plans.

Bid item #16: Owner's reserve

This bid item is reserved for the owner for additional work, if such work is authorized. Payment shall be issued upon the completed work, accepted in place.

BID PROPOSAL
LITERACY CENTER BASEMENT RENOVATIONS

We herewith propose to provide the following materials and services to the Town of Lincoln.
We understand that we will provide the following materials and services using our labor and equipment according to Rhode Island Standard Specifications or the attached specifications, whichever is more stringent.

We further understand that we will provide all materials, equipment and labor necessary to complete a finished job according to prevailing industry standards.

Please print or type the ***Bid Price*** in the area provided under each item number.

Item No.	***Description***	***Unit***	***Quantity***	***Unit Price***	***Bid Price***
1	Filling of sump hole	Lump Sum	1		
Bid Price written in words:					
2	Fill hole near water tank	Lump Sum	1		
Bid Price written in words:					
3	Remove and replace wooden platform at basement front entrance	Lump Sum	1		
Bid Price written in words:					
4	Renovation of former bathrooms	Lump Sum	1		
Bid Price written in words:					
5	Build new wall	Lump Sum	1		
Bid Price written in words:					
6	Seal rear basement window and chimney flue	Lump Sum	1		
Bid Price written in words:					
7	Dehumidifier platforms	Lump Sum	2		
Bid Price written in words:					
8	Repairs to stairway	Lump Sum	1		
Bid Price written in words:					
9	Furnish and install gutter guards	Lump Sum	1		
Bid Price written in words:					

Item No.	*Description*	*Unit*	*Quantity*	*Unit Price*	*Bid Price*
10	Caulk doors, windows and railing stanchions	Lump Sum	1		
Bid Price written in words:					
11	Adjust basement and bathroom door	Lump Sum	1		
Bid Price written in words:					
12	Install wall and repair work in old furnace room	Lump Sum	1		
Bid Price written in words:					
13	Build new canopy for ADA ramp entry	Lump Sum	1		
Bid Price written in words:					
14	Repair blue stone walkway	Lump Sum	1		
Bid Price written in words:					
15	Replace concrete walk	Lump Sum	1		
Bid Price written in words:					
16	Owner's reserve	Lump Sum	1		**$3,000.00**
Bid Price written in words: Three Thousand Dollars					

Number/Surety of Bid Bond Attached (5% of **Total Bid Price**): _____

Name of Bidder: _____

Address: _____

_____

Phone/Fax/E-Mail: _____

_____

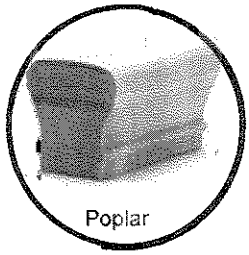
Authorized Representative: _____ Date: _____

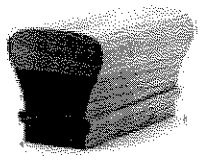
SPECIFIED PRODUCTS

Hardwood Handrail

Baird Brothers premium hardwood handrail is stocked in Poplar, Red Oak, Maple, and Cherry. We can pre-finish your handrail with a clear finish or you can choose one of Baird Brothers seven stain colors. Custom handrail and other hardwood species such as Ash, Walnut, Hickory, White Oak, Mahogany, Brazilian Cherry, and Lyptus are available upon request. For any further assistance please call us at 1-800-732-1697 or email.

Displaying items 1 - 5 of 5 **Sort:**


Poplar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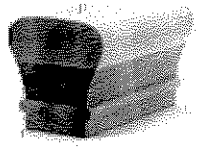
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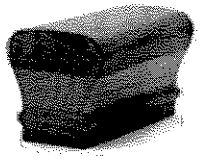
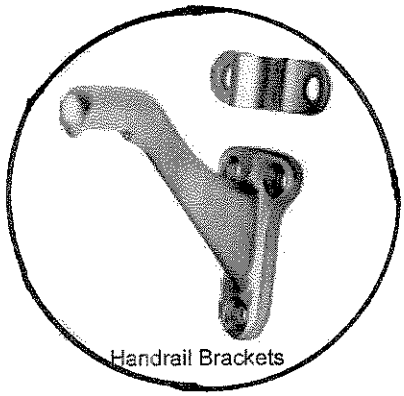

Cherry


Handrail Brackets

Baird Brothers Sawmill, Inc.
7060 Crory Rd. Canfield, OH 44406
P: 330.533.3122 F: 330.533.0781
Toll Free: 800.732.1697
Email: info@bairdbrothers.com

Hours of operation

(Eastern Time Zone)

Mon.: 7:30am - 7pm,
Tues. - Fri.: 7:30am - 4pm,
Sat.: 7:30am - noon,
Sun: CLOSED

DAP® Silicone *Plus*™ Premium Silicone Rubber Concrete & Masonry Sealant

Formulated to create a long-lasting watertight and weatherproof seal with superior flexibility and adhesion to a variety of building materials making it ideal for filling and sealing cracks and gaps. When cured, it is mold and mildew resistant and will not crack or shrink. Unlike acetoxy silicone sealants, DAP® Silicone *Plus*™ Premium Silicone Rubber Concrete & Masonry Sealant is low in odor. Meets ASTM Specification C 920, Class 25, Type S, Grade NS. Backed by a Lifetime Guarantee.

Case Code	Product Code	Unit Size	Color	SKU	Case Pack	Weight	Dimensions	Cases / Pallet	MSDS	Tech Bulletin	Where to Buy
08675	08675	10.1 fl. oz.	Gray	7079808675	12	11.96 lbs.	8x6x12	108	00008675001	TDB	

DAP® Silicone *Plus*™ Premium Silicone Rubber Window & Door Sealant

Formulated to create a long-lasting watertight and weatherproof seal with superior flexibility and adhesion to a variety of building materials. When cured, it is mold and mildew resistant and will not crack or shrink. Unlike acetoxy silicone sealants, DAP® Silicone *Plus*™ Premium Silicone Rubber Window & Door Sealant is low in odor. Meets ASTM Specification C 920, Class 25, Type S, Grade NS. Backed by a Lifetime Guarantee.

LOW VOC CONTENT

IMPROVES ENERGY EFFICIENCY

Case Code	Product Code	Unit Size	Color	SKU	Case Pack	Weight	Dimensions	Cases / Pallet	MSDS	Tech Bulletin	Where to Buy
08771	08771	10.1 fl. oz.	Clear	7079808771	12	9.74 lbs.	8x6x12	108	00008771001	TDB	
08780	08780	10.1 fl. oz.	White	7079808780	12	11.96 lbs.	8x6x12	108	00008780001	TDB	

APPROVED SEALANT FOR BASEMENT WALLS

Ready-Mixed Colors

BEIGE

BLUE

WHITE

GRAY

These chips have been reproduced as accurately as possible in process color lithography.

Latex Base and Oil Base DRYLOK Masonry Waterproofer is available in four popular colors to match virtually any decorating color scheme.

When a special color is desired, DRYLOK may be tinted to light shades with alkali-proof universal tinting colorants using a maximum of 2 fluid oz. per gallon.

Warranty

Latex Base or Oil Base DRYLOK Masonry Waterproofer, when applied according to directions on a properly prepared bare masonry surface, except when leaks are due to cracking of the surface or recurring efflorescence, is warranted to provide a waterproof coating for ten (10) years from date of sale or we will refund the cost of the DRYLOK. This is the exclusive remedy. Excludes swimming pools.

Item # 515 40

UGL® UNITED GILSONITE LABORATORIES
P.O. BOX 70, SCRANTON, PA 18501 • JACKSONVILLE, IL • JACKSON, MS • DAYTON, NV

Georgia-Pacific

DensArmor Plus®

Impact-Resistant Interior Panel

Technical Service Hotline 1.800.225.6119 or
www.gpgypsum.com

Handling Precautions

See *Handling and Use—Caution* section at end of this document.

Stack DensArmor Plus® Impact-Resistant Interior Panel flat on a level surface. As individual sheets are removed for installation, they should be raised up on edge carefully and carried in a vertical position. Appropriate handling for gypsum board is also outlined in Gypsum Association Publications GA-216.

Take care to avoid impact, undue flexing and subsequent damage to board edges, ends and corners.

Note: Material Safety Data Sheet (MSDS) is available on request.

Applicable Standards

Manufactured to meet ASTM C 1658, ASTM C 1396 Section 7, and ASTM C 1177. Test standard ASTM C 1629.

Sizes and Edges

DensArmor Plus Impact-Resistant Interior Panel Thickness: 5/8" – 15.9mm; Width: 4' (1219 mm); Lengths: 8' (2438 mm), 10' (3048 mm) and 12' (3658 mm); Edges: Tapered

Physical Properties

Properties	5/8" DensArmor Plus® Impact-Resistant Interior Panel
Thickness, nominal	5/8" (15.9 mm) ± 1/64" (0.4 mm)
Width, standard	4' (1219 mm) ± 3/32" (2.4 mm)
Length, standard	8' (2438 mm), 10' (3048 mm) and 12' (3658 mm) ± 1/4" (6.4 mm)
Weight[1], lbs./sq. ft., nominal (kg/m²)	2.8[1] (13.7)
Edges	Tapered
Surfacing	Coated fiberglass mat on face and back
Flexural strength, Parallel, lbf. (N) Perpendicular (N)	 >100 (444) >140 (622)
R value[2] °F•ft²•hr/BTU (K•m²/W)	.67 (0.118)
Nail pull resistance, minimum, lbf. (N)	≥90 (400)
Hardness core, edges and ends, lbf. (N)	>15 (67)
Water absorption (% of weight)	<5%
Surface burning characteristics (per ASTM E 84 or Can/ULC-S102): flame spread/smoke developed	 0/0
Humidified deflection	<1/8" (3 mm)

[1]Represents approximate weight for design and shipping purposes.

[2]Tested in accordance with ASTM C 518.

NOTE: Specified minimum values are as in applicable sections of ASTM C 1658, ASTM C 1177 and ASTM C 1396 Section 7.

Georgia-Pacific Gypsum

U.S.A.– Georgia-Pacific Gypsum LLC
Canada – Georgia-Pacific Canada LP

SALES INFORMATION AND ORDER PLACEMENT

U.S.A. Midwest: **1-800-876-4746** West: **1-800-824-7503**
South: **1-800-327-2344** Northeast: **1-800-947-4497**

CANADA Canada Toll Free: **1-800-387-6823**
Quebec Toll Free: **1-800-361-0486**

TECHNICAL INFORMATION

U.S.A. and Canada: **1-800-225-6119**
www.gpgypsum.com

Printed in the U.S.A. 1/10 GP-TM Lit. Item #532158.

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WARRANTIES, REMEDIES AND TERMS OF SALE For current warranty information for this product, please go to www.gpgypsum.com and select the product for warranty information. All sales of this product by Georgia-Pacific are subject to our Terms of Sale available at www.gpgypsum.com.

UPDATES AND CURRENT INFORMATION The information in this document may change without notice. Visit our website at www.gpgypsum.com for updates and current information.

CAUTION For product fire, safety and use information, go to www.gp.com/safetyinfo or call 1-800-225-6119.

HANDLING AND USE–CAUTION This product contains fiberglass facings which may cause skin irritation. Dust and fibers produced during the handling and installation of the product may cause skin, eye and respiratory tract irritation. Avoid breathing dust and minimize contact with skin and eyes. Wear long sleeve shirts, long pants and eye protection. Always maintain adequate ventilation. Use a dust mask or NIOSH/MSHA approved respirator as appropriate in dusty or poorly ventilated areas.

FIRE SAFETY CAUTION Passing a fire test in a controlled laboratory setting and/or certifying or labeling a product as having a one-hour, two-hour, or any other fire resistance or protection rating and, therefore, as acceptable for use in certain fire rated assemblies/systems, does not mean that either a particular assembly/system incorporating the product, or any given piece of the product itself, will necessarily provide one-hour fire resistance, two-hour fire resistance, or any other specified fire resistance or protection in an actual fire. In the event of an actual fire, you should immediately take any and all actions necessary for your safety and the safety of others without regard for any fire rating of any product or assembly/system.

THE BENEFITS OF LEAF RELIEF® BY PLY GEM

- **Completely Weather & Pest Resistant**
  Mounts securely and stays firmly in place to resist high winds, heavy amounts of snow and ice, ladder damage and pest invasion.
- **Fits Standard Gutters**
  Available in 5" and 6" sizes to fit new and existing gutters.
- **Also Available in Copper**
  5" and 6" retro-fit copper for most existing gutter systems
- **Simple Installation**
  Mounts directly to gutter. No lifting shingles ...which may cause other repair headaches or void your roof warranty!
- **Keeps Water Flowing**
  Patented Aluma-Perf™ technology keeps leaves, needles, seeds and twigs out...and off...in normal wind conditions*.

* Dry leaves require 6 mph winds and wet debris requires 23 mph winds. No-wind areas may require debris removal.

Windows Siding StoneVeneer Fence+Rail Accents

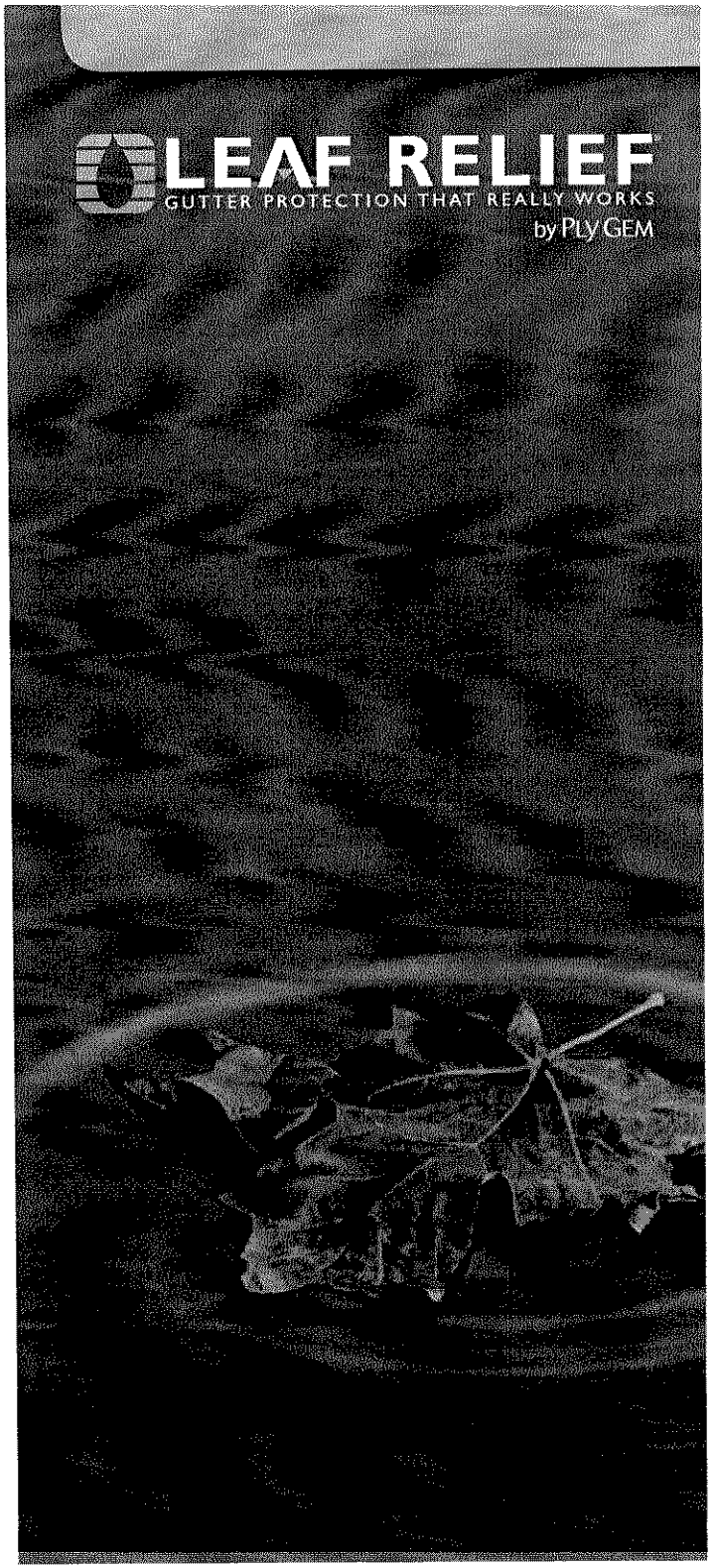
PLY GEM

2600 Grand Blvd., Suite 900
Kansas City, MO 64108

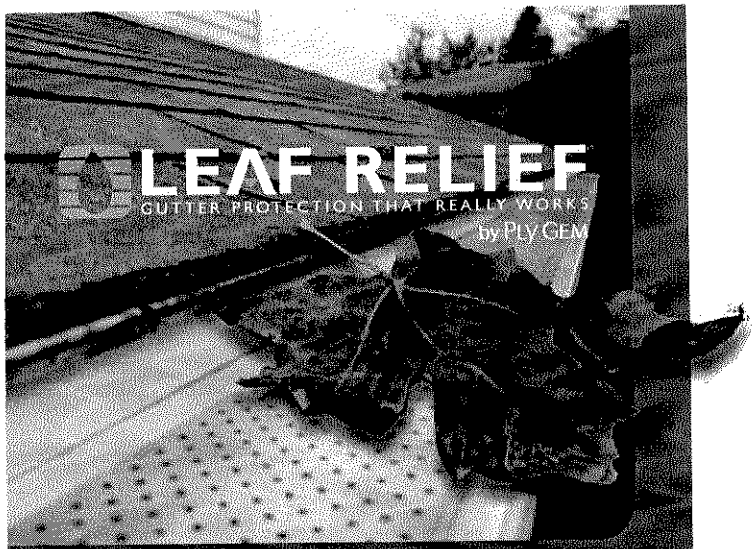
LEAF RELIEF®
GUTTER PROTECTION THAT REALLY WORKS
by PLY GEM

BB/CG/10.0/5M
510108999104

LEAF RELIEF
GUTTER PROTECTION THAT REALLY WORKS
by PLY GEM



800 587 1339 • www.leaf-relief.com



BUILT FOR PERFORMANCE AND PEACE OF MIND

Solid aluminum construction with proven performance. The Leaf Relief by Ply Gem Gutter Protection System has been manufactured to exacting standards to ensure a quality product. That's why we back it with our exclusive 10-Year Limited Warranty, which states:

NO CLOG 10 YEAR NO OVERFLOW

- The products are covered for 10 years.
- Leaf Relief by Ply Gem will keep gutters from overflowing due to internal gutter clogging.

NAHB RESEARCH CENTER GREEN APPROVED

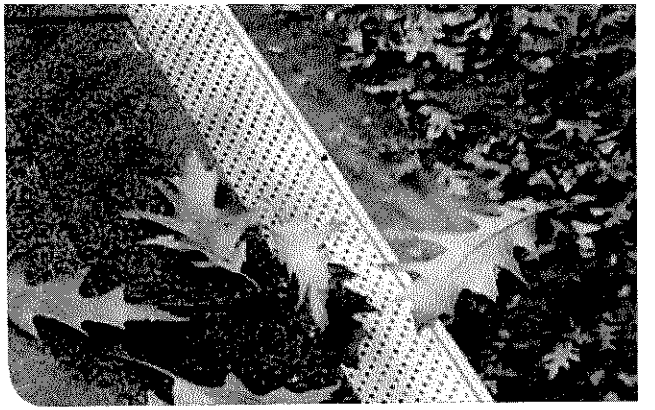
LEAF RELIEF HAS BEEN GREEN APPROVED BY THE NAHB RESEARCH CENTER. This means you can be assured that Leaf Relief complies with specific green practice criteria in the National Green Building Standard. Visit www.GreenApprovedProducts.com for more details.

Leaf Relief has a 10 year "No Clog, No Overflow" warranty that is backed by Mastic Home Exteriors, Inc. Consult the actual warranty for complete coverage details.

THE MOST EFFECTIVE PATENTED DESIGN

100% EFFECTIVE

Leaf Relief® by Ply Gem is more effective than other types of gutter protection at keeping natural debris, such as leaves, twigs and pine needles, from blocking your gutters.



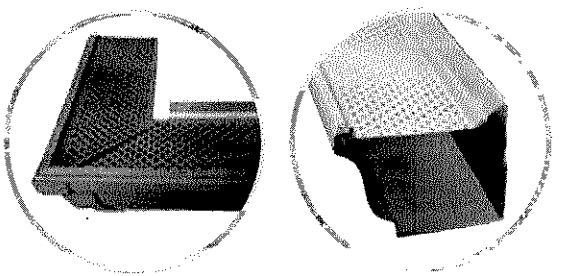
PRODUCT COMPARISON

	Installed price	100% debris* efficiency	Fits all roof slopes and never requires gutter repositioning	Virtually invisible from the ground	Never caves in	Pest resistant (birds/squirrels)
LEAF RELIEF®	$$	✓	✓	✓	✓	✓
Gutter Helmet®	$$$$				✓	✓
Gutter Topper®	$$$$				✓	✓
Waterloov®	$$$				✓	✓
Waterfall®	$$					

*Observation; Architectural testing (twigs) 3/03

IT'S GUTTER PROTECTION THAT REALLY WORKS.

Leaf Relief® by Ply Gem can drain 29.7" of rainfall an hour—that's more than the highest rainfall ever recorded (Holt, Missouri 1947 at 12") in one hour. Leaf Relief® is not only the most effective gutter protection system on the market, it is also the most invisible. Leaf Relief® lays flat and fits snugly on top of your gutter.



Windows Siding Stone Veneer Fence+Rail Accents

PLY GEM

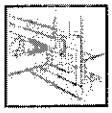
Code Approvals

FastenMaster's innovative LOK Line of Products is code-compliant for a variety of wood-to-wood applications. Below is a list of specific structural applications where LOK Line Products can be used to lower installed costs and meet or exceed building code.

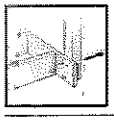
FastenMaster also has a team of trained professionals ready to answer any of your questions. Please contact us directly at 800-518-3569 to speak to a FastenMaster Representative.

Application Specific Code Approvals:

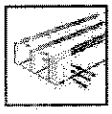
The following are links to application specific pages containing FastenMaster's code-compliant fastening methods.



Deck Ledger Code Approval Page



Post to Rim Joist Code Approval Page



Multi-ply Engineered Lumber Code Approval Page

Rafter Tail to Top Plate Code Approval Page

Carrying Beam to Notched Support Post Code Approval Page

Truss to Top Plate Code Approval Page

General Code Compliance Documents:

The following are links to downloadable documents regarding FastenMaster's Code Compliance.

FastenMaster's ES Report #1078

Click here to download a PDF Document of the current FastenMaster ICC-ES Report #1078.

FastenMaster's ACQ Approval Documentation

Click here to download a PDF Document outlining FastenMaster's Approval for use in pressure treated lumber such as ACQ.

ESR-1078
Reissued February 1, 2007
This report is subject to re-examination in two years.

ESR REPORT™

ICC Evaluation Service, Inc.
www.icc-es.org

Business/Regional Office ■ 5360 Workman Mill Road, Whittier, California 90601 ■ (562) 699-0543
Regional Office ■ 900 Montclair Road, Suite A, Birmingham, Alabama 35213 ■ (205) 599-9800
Regional Office ■ 4051 West Flossmoor Road, Country Club Hills, Illinois 60478 ■ (708) 799-2305

DIVISION: 06—WOOD AND PLASTICS
Section: 06090—Wood and Plastic Fastenings

REPORT HOLDER:

OMG, INC.
153 BOWLES ROAD
AGAWAM, MASSACHUSETTS 01001
(413) 789-0252
www.fastenmaster.com
mguthrie@olyfast.com

EVALUATION SUBJECT:

FASTENMASTER® THREADED WOOD FASTENERS

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2006 *International Building Code®* (IBC)
- 2006 *International Residential Code®* (IRC)

Properties evaluated:

Structural

2.0 USES

The FastenMaster Series fasteners described in this report are alternate dowel-type threaded fasteners used for wood-to-wood connections.

3.0 DESCRIPTION

3.1 General:

The FastenMaster Series fasteners described in this report are manufactured using a standard cold-forming process and are heat-treated. The fasteners have a proprietary coating with a lubricious clear top coat. The FastenMaster series includes three different fastener diameters that are available in lengths ranging from 2½ to 16 inches (63.5 to 406.4 mm), inclusive of thread. (See Tables 1A through 1D of this report for fastener dimensions.) The fasteners have a hex-head design with integral washer, rolled threads and a gimlet point.

These fasteners depart from ANSI B18.2.1 and B18.6.1 in thread design, exceed the bending yield strengths documented in Table 6 of American Forest & Paper Association (AF&PA) Technical Report 12, and are not installed with lead holes in accordance with the National Design Specification for Construction (NDS).

3.2 Materials:

The fasteners are made of carbon steel grade 1022 wire, conforming to ASTM A 510, with a minimum ultimate tensile strength of 60 ksi (414 MPa), and have a proprietary finish. Minimum bending yield strengths of the fasteners are listed in Tables 1A, 1B, 1C and 1D of this report.

4.0 DESIGN AND INSTALLATION

4.1 Design:

Design values for dowel bearing strengths are specified in Table 2 of this report. Design values for withdrawal connections are specified in Table 3 of this report. Design values for pull-through shall be as specified in Table 4 of this report. Design values for lateral resistance in wood-to-wood connections loaded parallel and perpendicular to the grain, are noted in Tables 5A and 5B of this report, using the applicable fastener diameter (minor thread diameter).

4.2 Installation:

The fasteners must be installed with a ½-inch (12.7 mm), low RPM/high torque electric drill (450 rpm) using the special hex-head driver bit included in each box. Lead holes are not required at the minimum end and edge distances listed in Table 6 of this report.

5.0 CONDITIONS OF USE

The fasteners described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 When the capacity of a connection is controlled by fastener metal strength, rather than wood strength, allowable strength of the connection are not permitted to be multiplied by the adjustment factors specified in the NDS.

5.2 When designing a connection, the connection shall be checked against Appendix E in the NDS to ensure the capacity of the connection and fastener group.

5.3 This evaluation report does not address fastener corrosion when the fastener is installed in chemically treated wood.

5.4 The fasteners are produced by OMG, Inc. at their facility located in Agawam, Massachusetts; under a quality control program with inspections by FM Approvals (AA-653).

6.0 EVIDENCE SUBMITTED

Data and test reports in accordance with the ICC-ES Acceptance Criteria for Alternate Dowel-type Threaded Fasteners Part A: Fasteners Less Than ¼ Inch in Diameter (AC233), dated October 2006.

7.0 IDENTIFICATION

The fasteners are identified by the designation "TrussLok®," "TrussLok-Z®," "TimberLok®," "LedgerLok®," "OlyLog®," or "LogHog®" on the packaging. Head markings consist of "F" followed by the length of the fastener. Each container of fasteners must have a label noting OMG's name and address, fastener size, inspection agency name (FM Approvals) and the evaluation report number (ICC-ES ESR-1078).

TABLE 1A—FASTENER SPECIFICATIONS: OLYLOG AND TIMBERLOK FASTENERS

OLYLOG® / TIMBERLOK® FASTENER DESIGNATION	HEAD MARKING	OVERALL LENGTH[1] (inches)	LENGTH OF THREAD (inches)[2,5]	UNTHREADED SHANK DIAMETER[3] (inch)	MINOR THREAD (ROOT) DIAMETER (inch)	ALLOWABLE STEEL STRENGTH		
						Bending Yield (Fyb, psi)[4,6]	Tensile (psi)	Single Shear (psi)
TLOK212 or LOG212	F2.5	$2^1/_2$	$1^1/_4$	0.189 [0.187 - 0.189]	0.172 (design diameter)	189,700	45,600	29,900
TLOK04 or LOG004	F4.0	4	2					
TLOK06 or LOG006	F6.0	6	2					
TLOK08 or LOG008	F8.0	8	2					
LOG009	F9.0	9	2					
TLOK10 or LOG010	F10.0	10	2					
LOG012	F12.0	12	2					
LOG014	F14.0	14	2					
LOG016	F16.0	16	2					

For SI: 1 inch = 25.4 mm, 1 psi = 6.895 kPa.

NOTES:

1. For purposes of measuring overall fastener length, fasteners must be measured from the underside of head to bottom of tip.
2. Length of thread includes tip. See detailed illustration.
3. Unthreaded shank diameters are shown in table with manufacturing tolerances in brackets [ ].
4. Bending yield strength determined per methods specified in ASTM D 1575 and based on the minor thread diameter.
5. Fastener installation and design values require complete threaded portion to be embedded in the main member.
6. Fastener bending yield strength is determined by the 5% diameter (0.05D) offset method of analyzing load-displacement curves developed from bending tests.

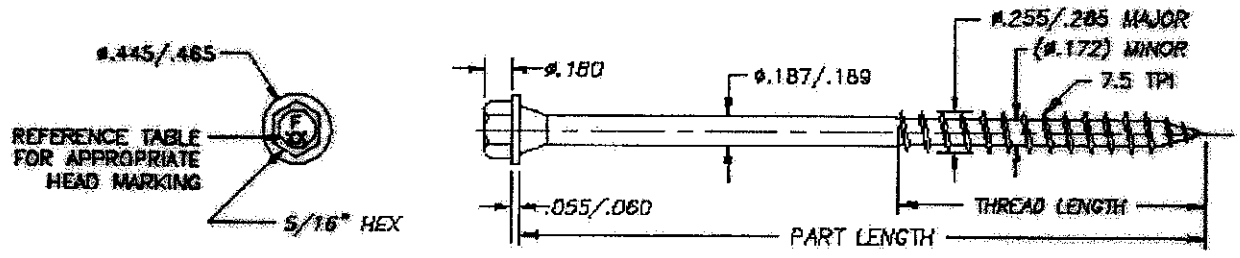


TABLE 1B—FASTENER SPECIFICATIONS: LOGHOG AND LEDGERLOK FASTENERS

LEDGERLOK® / LOGHOG® FASTENER DESIGNATION	HEAD MARKING	OVERALL LENGTH[1] (inches)	LENGTH OF THREAD (inches)[2,5]	UNTHREADED SHANK DIAMETER[3] (inch)	MINOR THREAD (ROOT) DIAMETER (inch)	ALLOWABLE STEEL STRENGTH		
						Bending Yield (Fyb, psi)[4,6]	Tensile (psi)	Single Shear (psi)
LL358	F3.6	3⅝	2	0.228 [.227 - 0.229)	0.202 (design diameter	200,700	49,800	32,800
LL005	F5.0	5	3					
LHOG009	F9.0	9	3			183,200	32,700	21,800
LHOG011	F11.0	11	3					
LHOG012	F12.0	12	3					
LHOG013	F13.0	13	3					
LHOG014	F14.0	14	3					
LHOG015	F15.0	15	3					

For SI: 1 inch = 25.4 mm, 1 psi = 6.895 kPa.

NOTES:

1. For purposes of measuring overall fastener length, fasteners must be measured from the underside of head to bottom of tip.
2. Length of thread includes tip. See detailed illustration.
3. Unthreaded shank diameters are shown in table with manufacturing tolerances in brackets [ ].
4. Bending yield strength determined per methods specified in ASTM D 1575 and based on the minor thread diameter.
5. Fastener installation and design values require complete threaded portion to be embedded in the main member.
6. Fastener bending yield strength is determined by the 5% diameter (0.05D) offset method of analyzing load-displacement curves developed from bending tests.

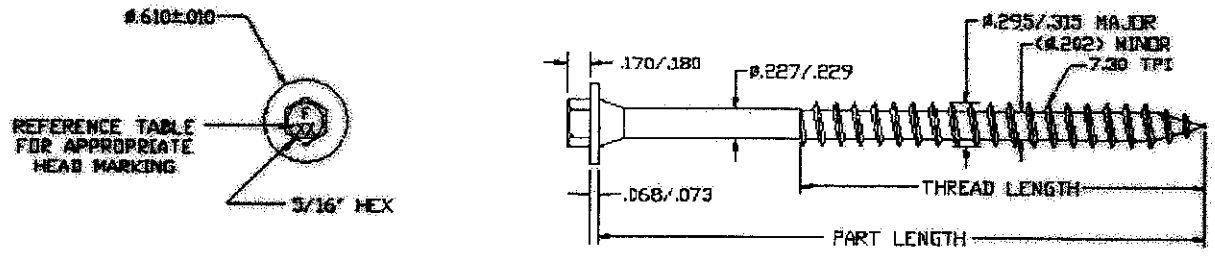


TABLE 1C—FASTENER SPECIFICATIONS: TRUSSLOK FASTENERS

TRUSSLOK® FASTENER DESIGNATION	HEAD MARKING	OVERALL LENGTH[1] (inches)	LENGTH OF THREAD (inches)[2,5]	UNTHREADED SHANK DIAMETER[3] (inch)	MINOR THREAD (ROOT) DIAMETER (inch)	ALLOWABLE STEEL STRENGTH		
						Bending Yield (Fyb, psi)[4,6]	Tensile (psi)	Single Shear (psi)
EWS338	F3.3	3 3/8	1 1/2	0.228 [0.227 - 0.229]	0.215 (design diameter)	202,200	49,800	32,800
EWS005	F5.0	5						
EWS670	F6.7	6.7						

For SI: 1 inch = 25.4 mm, 1 psi = 6.895 kPa.

NOTES:

1. For purposes of measuring overall fastener length, fasteners must be measured from the underside of head to bottom of tip.
2. Length of thread includes tip. See detailed illustration.
3. Unthreaded shank diameters are shown in table with manufacturing tolerances in brackets [ ].
4. Bending yield strength determined per methods specified in ASTM D 1575 and based on the minor thread diameter.
5. Fastener installation and design values require complete threaded portion to be embedded in the main member.
6. Fastener bending yield strength is determined by the 5% diameter (0.05D) offset method of analyzing load-displacement curves developed from bending tests.

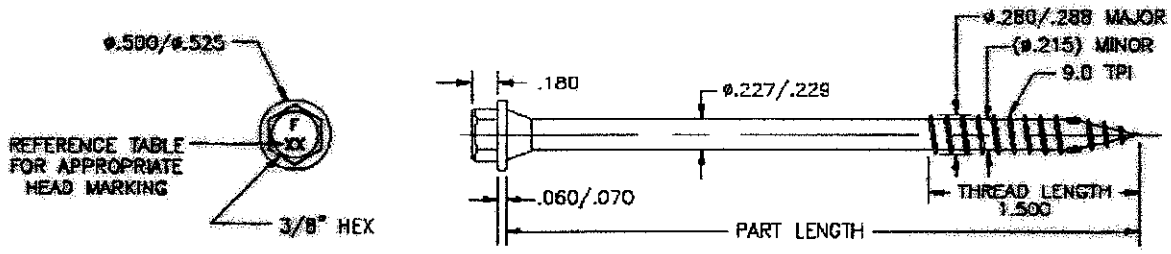


TABLE 1D—FASTENER SPECIFICATIONS: TRUSSLOK-Z FASTENERS

TRUSSLOK-Z® FASTENER DESIGNATION	HEAD MARKING	OVERALL LENGTH[1] (inches)	LENGTH OF THREAD (inches)[2,5]	UNTHREADED SHANK DIAMETER[3] (inch)	MINOR THREAD (ROOT) DIAMETER (inch)	ALLOWABLE STEEL STRENGTH		
						Bending Yield (Fyb, psi)[4,6]	Tensile (psi)	Single Shear (psi)
TSLZ278	F2.8	2 7/8	1 1/4	0.228 [0.227 - 0.229]	0.202 (design diameter)	236,300	49,800	32,800
TSLZ412	F4.5	4 1/2						
TSLZ006	F6.0	6						

For SI: 1 inch = 25.4 mm, 1 psi = 6.895 kPa.

NOTES:

1. For purposes of measuring overall fastener length, fasteners must be measured from the underside of head to bottom of tip.
2. Length of thread includes tip. See detailed illustration.
3. Unthreaded shank diameters are shown in table with manufacturing tolerances in brackets [ ].
4. Bending yield strength determined per methods specified in ASTM D 1575 and based on the minor thread diameter.
5. Fastener installation and design values require complete threaded portion to be embedded in the main member.
6. Fastener bending yield strength is determined by the 5% diameter (0.05D) offset method of analyzing load-displacement curves developed from bending tests.

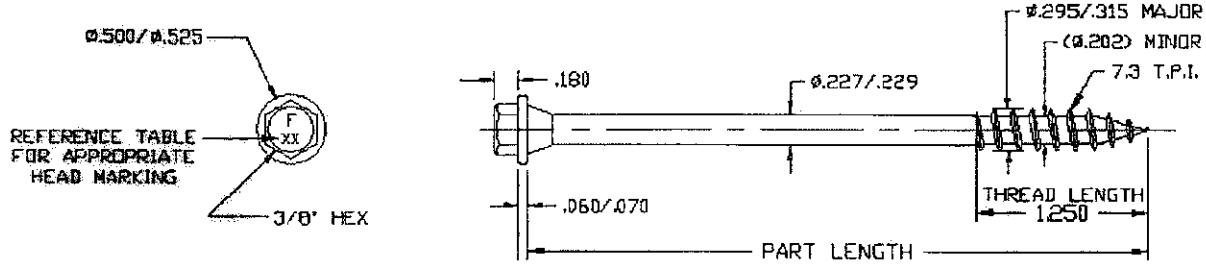


TABLE 2—DOWEL BEARING STRENGTH (psi)
(Test results are the 5% offset value)

FASTENER DESIGNATION	DIRECTION OF LOADING	CALCULATED DOWEL BEARING STRENGTH PER REGRESSION EQUATIONS								
		0.67	0.57	0.55	0.5	0.46	0.43	0.42	0.36	0.31
OlyLog® / TimberLok® fasteners	Parallel to grain	7,950	6,400	6,150	5,600	5,150	4,800	4,700	4,050	3,450
	Perpendicular to grain	7,950	6,200	5,900	5,150	4,550	4,150	4,000	3,200	2,550
LogHog® / LedgerLok® / TrussLok® / TrussLok-Z® fasteners	Parallel to grain	7,950	6,400	6,150	5,600	5,150	4,800	4,700	4,050	3,450
	Perpendicular to grain	7,950	5,900	5,550	4,700	4,150	3,750	3,650	2,900	2,350
Wet Service Factor, C_m, for lateral loads	*Parallel to grain*	*0.7*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*
	Perpendicular to grain	*0.6*	*0.6*	*0.6*	*0.6*	*0.7*	*0.7*	*0.7*	*0.6*	*0.5*

TABLE 3—DIRECT WITHDRAWAL DESIGN VALUES (*W*)
[Tabulated withdrawal design values (*W*) are in pounds per inch of thread penetration into side grain of main member]

FASTENER DESIGNATION		THREAD LENGTH, *L* (inches)	*W* (lbs./in.) FOR SPECIFIC GRAVITIES OF:								
			0.67	0.57	0.55	0.5	0.46	0.43	0.42	0.36	0.31
OlyLog® / TimberLok® fasteners	TLOK212 or LOG212	1.25	264	207	196	170	150	136	131	104	83
	All other lengths	2									
Wet Service Factor, C_w, for withdrawal loads			*0.7*	*0.7*	*0.7*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.7*
LogHog® / LedgerLok® fasteners	LL358	2	297	233	221	192	169	153	148	117	94
	All other lengths	3									
TrussLok®	All lengths	$1^1/_2$	—	—	—	153	—	—	—	—	—
TrussLok-Z®	All lengths	$1^1/_4$	—	233	221	192	169	153	148	117	—
Wet Service Factor, C_w, for withdrawal loads			*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.7*	*0.7*
NDS equation used to calculate design values			11.2-1	11.2-1	11.2-1	11.2-1	11.2-1	11.2-1	11.2-1	11.2-1	11.2-1

For SI: 1 inch = 25.4 mm, 1 pound = 4.448 kPa.

NOTES:

1. **Values must be multiplied by all applicable adjust factors (see NDS).**
2. **Embedded thread length is that portion held by the main member (including tip).**

TABLE 4—PULL-THROUGH DESIGN VALUES (*P*)

FASTENER DESIGNATION		THREAD LENGTH, *L* (inches)	*P* (lbs./in.) FOR SPECIFIC GRAVITIES OF:								
			0.67	0.57	0.55	0.5	0.46	0.43	0.42	0.36	0.31
OlyLog® / TimberLok® fasteners	TLOK212 or LOG212	1.25	334	218	200	158	130	112	107	79	62
	All other lengths	2									
LogHog® / LedgerLok® fasteners	LL358	2	471	323	299	243	206	181	173	133	108
	All other lengths	3									
TrussLok®	All lengths	$1^1/_2$	—	—	—	264	—	—	—	—	—
TrussLok-Z®	All lengths	$1^1/_4$	—	366	327	248	199	168	159	114	—

For **SI: 1 inch = 25.4 mm, 1 pound** = 4.448 kPa.

NOTES:

1. Values must be multiplied by all applicable adjustment factors (see NDS).
2. Embedded thread length is that portion held by the main member (including tip).
3. Tabulated pull-through design values (*P*) are in pounds per inch through side member.

TABLE 5A—LATERAL DESIGN VALUES (Z) FOR SINGLE SHEAR (TWO-MEMBER) CONNECTIONS WITH LOADING PARALLEL TO GRAIN

[Tabulated lateral design values (Z) are in pounds per fastener into sawn lumber or SCL[3] with both members of identical specific gravity]

FASTENER DESIGNATION		SIDE MEMBER THICKNESS, t_s (inches)	FASTENER PENETRATION, p (inches)	Z (lbs.) FOR SINGLE SHEAR (TWO-MEMBER) CONNECTIONS LOADED PARALLEL TO THE GRAIN FOR SPECIFIC GRAVITIES OF:								
				0.67	0.57	0.55	0.5	0.46	0.43	0.42	0.36	0.31
OlyLog® / TimberLok® fasteners	TLOK212 or LOG212	$1^1/_2$	1	265	224	217	203	191	181	179	161	143
	TLOK04 or LOG006	$1^1/_2$	$2^1/_2$	299	268	263	251	240	231	228	228	1788
	TLOK06 or LOG006	4	2						232	230	213	197
	TLOK08 or LOG008	6	2									
	LOG009	7	2									
	TLOK10 or LOG010	8	2									
	LOG012	10	2									
	LOG014	12	2									
	LOG016	14	2									
LedgerLok® fasteners	LL358	$1^1/_2$	$2^1/_8$	373	325	315	292	274	259	255	229	204
	LL005	$1^1/_2$	$3^1/_2$					274	259		229	204
LogHog® fasteners	LHOG009	6	3	357	320	314	299	287	277	274	255	235
	LHOG011	8	3									
	LHOG012	9	3									
	LHOG013	10	3									
	LHOG014	11	3									
	LHOG015	12	3									
TrussLok®	EWS338	$1^3/_4$	$1^5/_8$	—	—	—	318	—	—	—	—	—
	EWS005	$1^3/_4$	$3^1/_4$				333					
	EWS670	$1^3/_4$	5				333					
TrussLok-Z®	TSLZ278	$1^1/_2$	$1^3/_8$	—	306	294	268	246	229	225	194	—
	TSLZ412	$1^1/_2$	3		336	326	303	285	270	266	239	
	TSL006	$1^1/_2$	$4^1/_2$		336	326	303	285	270	266	239	

For SI: 1 inch = 25.4 mm, 1 pound = 4.448 kPa.

NOTES:

1. Values must be multiplied by all applicable adjustment factors (see NDS).
2. Embedded thread length is that portion held by the main member (including tip).
3. SCL is structural composite lumber (laminated veneer lumber is LVL, and parallel strand lumber is PSL). This group also includes all OSB, structural I plywood, and marine-grade plywood panels.
4. p = depth of fastener penetration into wood member, in inches.
5. Tabulated values are results of calculations per NDS Section 11.3, where D = minor thread diameter.

TABLE 5B—LATERAL DESIGN VALUES (*Z*) FOR SINGLE SHEAR (TWO-MEMBER) CONNECTIONS WITH LOADING PERPENDICULAR TO GRAIN

[Tabulated lateral design values (*Z*) are in pounds per fastener into sawn lumber or SCL[3] with both members of identical specific gravity]

FASTENER DESIGNATION		SIDE MEMBER THICKNESS, t_s (inches)	FASTENER PENETRATION, *p* (inches)	Z (lbs.) FOR SINGLE SHEAR (TWO-MEMBER) CONNECTIONS LOADED PARALLEL TO THE GRAIN FOR SPECIFIC GRAVITIES OF:								
				0.67	0.57	0.55	0.5	0.46	0.43	0.42	0.36	0.31
OlyLog® / TimberLok® fasteners	TLOK212 or LOG212	1 1/2	1	265	219	211	191	175	164	160	133	106
	TLOK04 or LOG006	1 1/2	2 1/2	299	264	257	240	222	206	200	168	142
	TLOK06 or LOG006	4	2					226	216	212	190	166
	TLOK08 or LOG008	6	2									
	LOG009	7	2									
	TLOK10 or LOG010	8	2									
	LOG012	10	2									
	LOG014	12	2									
	LOG016	14	2									
LedgerLok® fasteners	LL358	1 1/2	2 1/8	373	305	290	255	233	216	212	179	145
	LL005	1 1/2	3 1/2			290	255	233	216		180	157
LogHog® fasteners	LHOG009	6	3	357	307	298	274	258	245	242	215	194
	LHOG011	8	3									
	LHOG012	9	3									
	LHOG013	10	3									
	LHOG014	11	3									
	LHOG015	12	3									
TrussLok®	EWS338	1 3/4	1 5/8	—	—	—	267	—	—	—	—	—
	EWS005	1 3/4	3 1/4				290					
	EWS670	1 3/4	5				290					
TrussLok-Z®	TSLZ278	1 1/2	1 3/8	—	282	265	225	198	179	174	139	—
	TSLZ412	1 1/2	3		316	301	266	243	227	222	190	
	TSL006	1 1/2	4 1/2		316	301	266	243	227	222	190	

For **SI:** 1 inch = 25.4 mm, 1 pound = 4.448 kPa.

NOTES:

1. Values must be multiplied by all applicable adjustment factors (see NDS).
2. Embedded thread length is that portion held by the main member (including tip).
3. SCL is structural composite lumber (laminated veneer lumber is LVL, and parallel strand lumber is PSL). This group also includes all OSB, structural I plywood, and marine-grade plywood panels.
4. p = depth of fastener penetration into wood member, in inches.
5. Tabulated values are results of calculations per NDS Section 11.3, where *D* = minor thread diameter.

TABLE 6—CONNECTION GEOMETRY

CONNECTION GEOMETRY/CRITERIA	DIAMETERS	OLYLOG® / TIMBERLOK® FASTENERS (inches)	LOGHOG® / LEDGERLOK® / TRUSSLOK® / TRUSSLOK-Z® FASTENERS (inches)
Minimum edge distance (2.5 diameters per NDS Commentary Table C11.4-1):	8	1 1/2	1 3/4
From edge (4 diameters per NDS Table 11.5.1A), loaded edge:	8	1 1/2	1 3/4
Minimum end distance, tension load parallel to grain (per NDS Commentary Table C11.4-1):	16	3	3 3/4
Compression load parallel to grain (NDS Commentary Table C11.4-1):	10	2	2 3/8
Spacing (pitch) between fasteners in a row, parallel to grain:	15	2 3/4	3 1/2
Perpendicular to grain:	10	2	2 3/8
Spacing (gage) between rows of fasteners, in-line:	5	1	1 1/4
Spacing (gage) between rows of fasteners, staggered:	2.5	1/2	5/8
Minimum penetration into the main member for single shear connections	6	1 1/4	1 3/8

For SI: 1 inch = 25.4 mm.