



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Cast-Crete USA, LLC
6324 County Road 579
Seffner, Florida 33584

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: "Cast-Crete" Maxx Span Concrete U-Lintel

APPROVAL DOCUMENT: Drawing No. MAXX-1, titled "Cast-Crete Maxx Span Concrete U-Lintel", sheet 1 of 1, prepared by Craig Parrino, P.E., dated April 16, 2020, signed and sealed by Craig Parrino, P.E., on April 27, 2021, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each lintel shall bear a permanent label with the manufacturer's name or logo and the Miami-Dade County logo.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA #21-0504.02 and consists of this page 1, evidence submitted page E-1 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



Helmy A. Makar
11/09/2023

NOA No. 23-0914.05
Expiration Date: 07/29/2026
Approval Date: 11/09/2023

Cast-Crete USA, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. MAXX-1, titled "Cast-Crete Maxx Span Concrete U-Lintel", sheet 1 of 1, prepared by Craig Parrino, P.E., dated April 16, 2020, signed and sealed by Craig Parrino, P.E., on April 27, 2021.*

B. TESTS

1. *Test report on flexural testing on Cast-Crete Maxx Span Concrete U-Lintel Filled Series 8FF16-1B and 8F32-1B, per ASTM E-529-94, prepared by FTL, Report No. 12359, dated 02/01/2021, signed and sealed by Idalmis Ortega, P.E., on 04/22/2021.*

C. CALCULATIONS

1. *Calculations for Cast-Crete Maxx Span Concrete U-Lintel, dated 03/15/2020, 141 pages, prepared by Craig Parrino, P.E., signed and sealed by Craig Parrino, P.E., on 04/27/2021.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Regulatory and Economic Resources (RER).*

E. MATERIAL CERTIFICATION

1. *Quality System Manual for Cast-Crete dated January 2021.*

F. OTHER

1. *Letter from Cast-Crete USA, LLC, dated April 27, 2021, signed and sealed by Craig Parrino, P.E., certifying compliance with the Florida Building Code, 2020 Edition.*

2 NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE


1. *By Miami-Dade County Department of Regulatory and Economic Resources (RER).*

E. MATERIAL CERTIFICATION

1. *Quality System Manual for Cast-Crete dated January 2021.*

F. OTHER

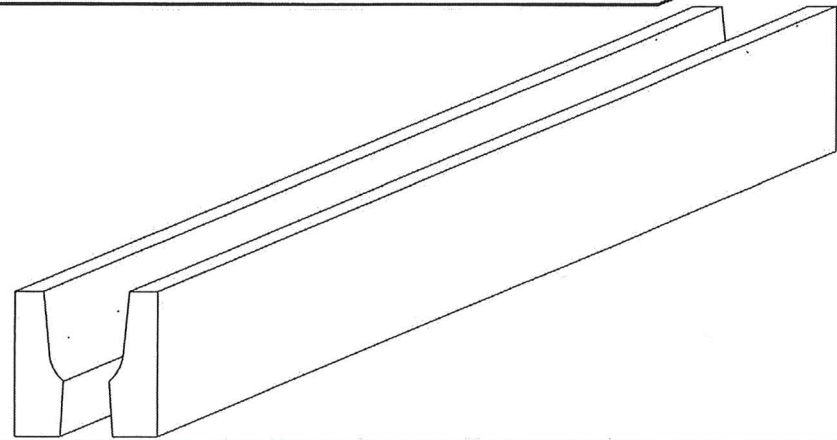
1. *Letter from Cast-Crete USA, LLC, dated August 17, 2023, signed and sealed by Craig Parrino, P.E., certifying compliance with the Florida Building Code, 2023 Edition.*



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 23-0914.05
Expiration Date: 07/29/2026
Approval Date: 11/09/2023

CAST-CRETE[®] MAXX SPAN[™]

PRESTRESSED CONCRETE U-LINTEL

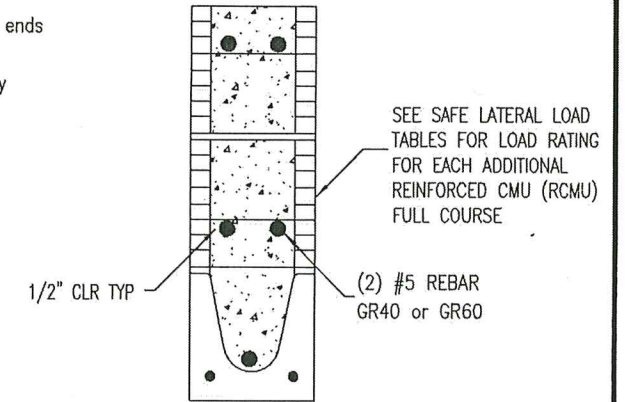


GENERAL NOTES

- Materials:
 - f'c prestressed lintel = 6000 psi w/ 2.5#/yd synthetic fibers
 - f'c grout = 3000 psi per ASTM C476 max. 3/8 inch aggregate
 - concrete masonry units (CMU) per ASTM C90 with minimum net area compressive strength = 2000 psi
 - rebar per ASTM A615 Grade 60 or 40
 - prestressing strand per ASTM A416 Grade 270 low relaxation
 - mortar per ASTM C270 Type M or S
 - 7/32 wire per ASTM A510
- All safe load tables based on 8 inch nominal bearing.
- Provide full mortar bed and head joints.
- The number in parenthesis indicates the percent reduction for grade 40 field added rebar.

Example: 25'-4" Lintel 8F16-2T safe uplift load = 342 (17) w/ 17% reduction $\Rightarrow 342 (.83) = 284$ plf
- All lintels meet or exceed L/360 deflection.
- Shore precast lintel prior to laying composite block and grouting.
- One #7 rebar may be substituted for two #5 rebars.
- Installation/attachment of lintel must comply with the architectural and/or structural documents.
- The designer may evaluate concentrated loads from the safe load tables by calculating the maximum resisting moment and shear at d-away from the face of support.
- Safe loads are uniform loads in units of pounds per linear foot (PLF).
- Bottom field added #7 rebar to be located at the bottom of the precast lintel U-cavity and shall not be spliced.
- Precast lintels are manufactured with 5-1/2" long notches at the ends to accommodate vertical cell reinforcing and grouting.
- The exterior surface of lintels installed in exterior concrete masonry walls shall have a coating of stucco applied in accordance with ASTM C-926 or other approved coating.
- Lintels loaded simultaneously with vertical (gravity or uplift) and horizontal (lateral) loads should be checked for the combined loading with the following equation:

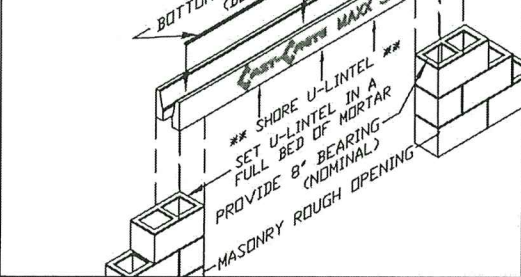
$$\frac{\text{Applied vertical load}}{\text{Safe vertical load}} + \frac{\text{Applied horizontal load}}{\text{Safe horizontal load}} \leq 1.0$$
- For composite lintel heights not shown, use safe load from next next lower height shown.
- For lintel lengths not shown, use safe load from next longest longest length shown.
- Safe loads are superimposed allowable loads.
- Safe loads based on rational design analysis per TMS 402 and ACI 318.
- Additional lateral load capacity can be obtained by the designer by providing additional reinforced concrete masonry units (RCMU) above the precast lintel. See sketch below:



INSTALLATION STEPS

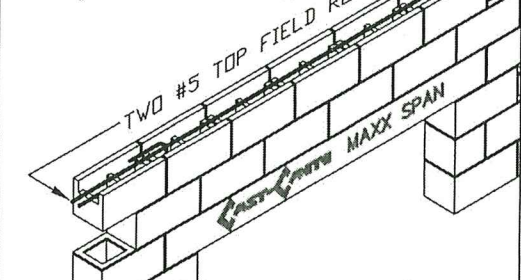
STEP 1

SET U-LINTEL, INSTALL SHORING, & BOTTOM FIELD REBAR IN U-CAVITY.



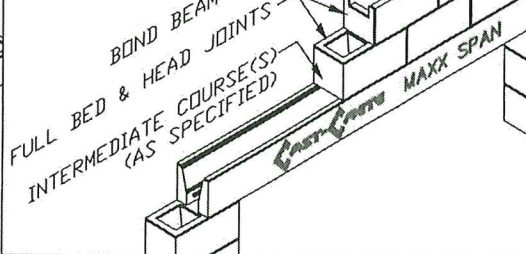
STEP 3

ADD TWO #5 REBAR TO THE TOP COURSE.



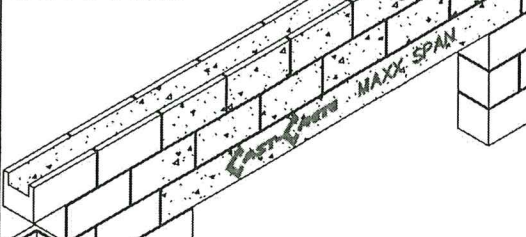
STEP 2

LAY ADDITIONAL COURSES OF CONCRETE MASONRY UNITS AS SPECIFIED USING FULL BED AND HEAD JOINTS.



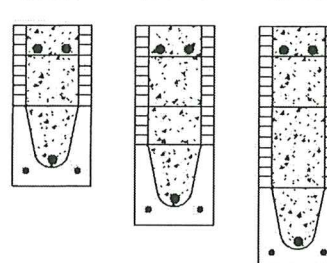
STEP 4

FILL COMPOSITE U-LINTEL WITH MINIMUM 3000 PSI GROUT. GROUT SLUMP TO BE 8 TO 11 INCHES.



INSTALLATION STEPS

8F16 8F20 8F24



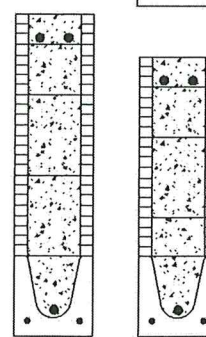
TYPE DESIGNATION

F = FILLED WITH GROUT / U = UNFILLED
QUANTITY OF #7 REBAR AT BOTTOM OF LINTEL U-CAVITY

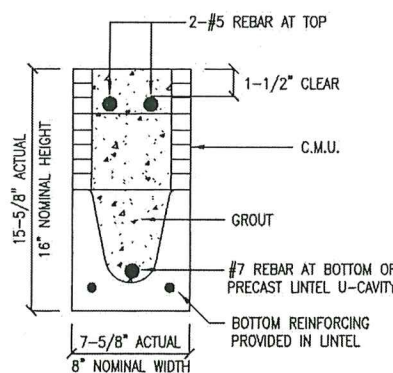
8F16-1B/2T

NOMINAL WIDTH
NOMINAL HEIGHT

QUANTITY OF #5 REBAR AT TOP



8F32 8F28

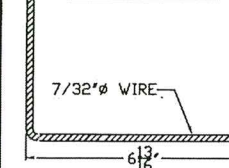


CAST-CRETE [®]		GRAVITY SAFE LOADS - PLF				
LENGTH	TYPE	8F16-1B	8F20-1B	8F24-1B	8F28-1B	8F32-1B
25'-4"	PRESTRESSED	417	637	918	1100	1242
27'-4"	PRESTRESSED	330	531	767	931	1065
29'-4"	PRESTRESSED	263	445	648	800	962

CAST-CRETE [®]		UPLIFT SAFE LOADS - PLF					LATERAL SAFE LOADS - PLF	
LENGTH	TYPE	8F16-2T	8F20-2T	8F24-2T	8F28-2T	8F32-2T	8F8	* RCMU
25'-4"	PRESTRESSED	342 (17)	488 (25)	608 (26)	720 (27)	833 (27)	109	37 (14)
27'-4"	PRESTRESSED	310 (16)	439 (24)	546 (25)	647 (25)	747 (25)	89	32 (14)
29'-4"	PRESTRESSED	285 (15)	400 (23)	497 (24)	588 (24)	679 (24)	74	28 (14)

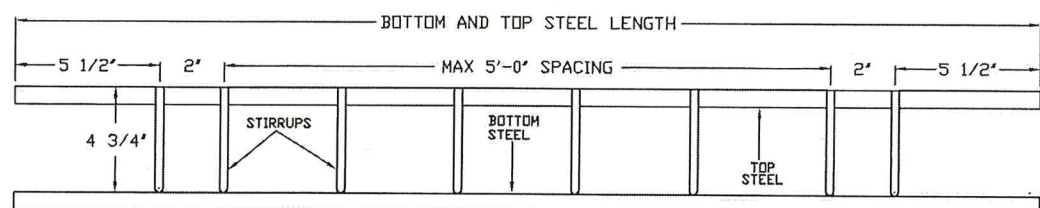
(#) THE NUMBERS IN PARENTHESIS ARE % REDUCTIONS FOR GRADE 40 FIELD ADDED REBAR. SEE GENERAL NOTE 4
* SEE GENERAL NOTE 19 FOR ADDITIONAL INFORMATION ON REINFORCED CONCRETE MASONRY UNITS (RCMU)

STIRRUP DETAIL

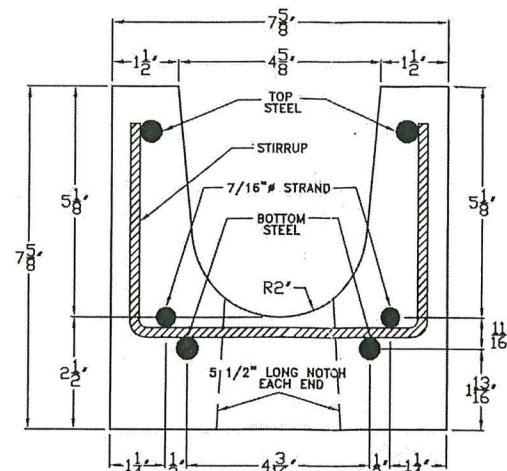


LINTEL LENGTH	VOLUME CY	WEIGHT LBS	BOTTOM STEEL		TOP STEEL		STIRRUP SPACING	NO. OF STIRRUPS
			TYPE	LENGTH	TYPE	LENGTH		
25'-4"	0.250	978	2-#4 REBAR	25'-0"	2-#4 REBAR	25'-0"	MAX 5'-0"	8
27'-4"	0.270	1057	2-#4 REBAR	27'-0"	2-#4 REBAR	27'-0"	MAX 5'-0"	9
29'-4"	0.290	1135	2-#4 REBAR	29'-0"	2-#4 REBAR	29'-0"	MAX 5'-0"	9

NOTE: ALL REBAR IN PRESTRESSED U-LINTEL GRADE 60

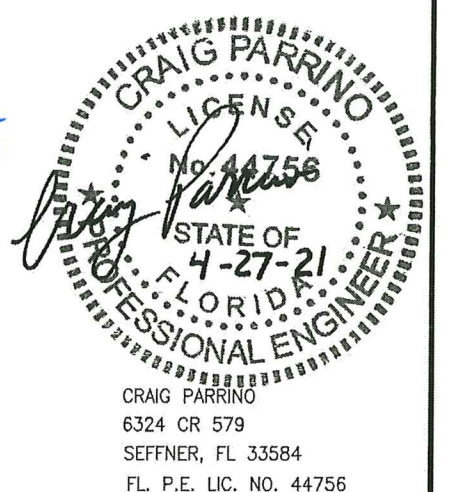


LINTEL REINFORCING CAGE FABRICATION MODEL



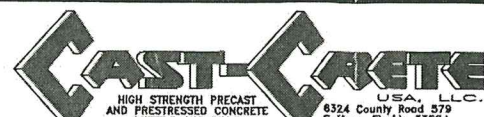
PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No. 23-0914.05
Expiration Date 07/29/2026
By *Heg A. Miller*
Miami Dade Product Control

Approved as complying with the Florida Building Code
Date 07/29/2021
NOA# 21-0504.02
Miami Dade Product Control
By *Heg A. Miller*



NO.	BY	REVISION	DATE

MEMBER OF
CM NATIONAL CONCRETE MASONRY ASSOCIATION



TITLE: CAST-CRETE MAXX SPAN U-LINTEL			
FILE NAME: MAXX SPAN 1	DRAWN BY: CRAIG PARRINO	SCALE: NOT TO SCALE	
DATE: 4/16/2020	DRAWING No.: MAXX-1	PAGE 1 OF 1	