MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Overhead Door Corporation
1900 Crown Drive
Farmers Branch ,TX 75234

Your application for Notice of Acceptance (NOA) of:
Roll-Up Garage Door 10' Wide
under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

ACCEPTANCE NO.: 01-0227.04
EXPIRES: 03/26/2006

Raul Rodriguez
Chief Product Control Division

THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 04/19/2001

Overhead Door Corporation

ACCEPTANCE NO: 01-0227.04

APPROVED: APR 19 2001

EXPIRES: 03/26/2006

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1.0 SCOPE

1.1 This renews the Notice of Acceptance No. 98-0205.05, which was issued on 03/26/98. It approves a roll up door with maximum dimensions of 10'-0" wide x10'-0" through 24'-0" high as described in section 2 of this Notice of Acceptance. It is designed to comply with the South Florida Building Code, 1994 edition for Miami-Dace County (S.F.B.C.). For the locations where the pressure requirements, as determined by the S.F.B.C. chapter 23, do not exceed the design pressure-rating values indicated on the approved drawings.

2.0 PRODUCT DESCRIPTION:

2.1 The **Overhead Rolling Door** and its components shall be built in strict compliance with the following documents: Drawing No. D-307635, titled "Series 610/620, Rolling Service Door Dade County", prepared by Overhead Door, sheets 1 through 2 of 2 dated 02/28/94 & 04/23/94 and with latest revision on 02/20/98. The drawing shall bear the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami Dade Product Control Division. These documents shall hereinafter be referred to as the approved drawings.

3.0 LIMITATION:

3.1 Units with dimensions equal to or smaller than those shown on the approved drawing shall qualify under this approval.

4.0 INSTALLATION:

4.1 The Roll-Up Door and its components shall be installed in strict compliance with the approved drawings.
4.2 The installation of this door does **not require** a hurricane protection system.
4.3. The door operating mechanism (not included on this approval) shall be certified by Underwriters Laboratories or other recognized agency.

5.0 LABELLING

5.1 Each door shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement "Miami Dade County Product Control Approved"

6.0 BUILDING PERMIT REQUIREMENTS.

6.1 Application for Building Permit shall be accompanied by copies of the following:
6.1.1 This Notice of Acceptance.
6.1.2 Duplicate copies of the approved drawings as identified in section 2; clearly marked to show the Components selected for the proposed installation.
6.1.3 Any other document required by the building Official or the S.F.B.C. in order to properly evaluate the installation of this system.

Candido Font, PE, Sr. Product Control Examiner
Product Control Division

Overhead Door Corporation.

ACCEPTANCE NO : 01-0227.04

APPROVED: APR 19 2001

EXPIRES: 03/26/2006

NOTICE OF ACCEPTANCE STANDARD CONDITIONS

1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documents, including test-supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
3. Renewals of Acceptance will not be considered if:
   a) There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes;
   b) The product is no longer the same product (identical) as the one originally approved;
   c) If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product;
   d) The engineer, who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering professions.
4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
5. Any of the following shall also be grounds for removal of this Acceptance:
   a) Unsatisfactory performance of this product or process;
   b) Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purpose.
6. The Notice of Acceptance 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 Notice of Acceptance is displayed, then it shall be done in its entirety.
7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all times. The engineer need not reseal the copies.
8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
9. This Acceptance contains pages 1, 2, and this last page 3.

Candido Font, PE, Sr. Product Control Examiner
Product Control Division

END OF THIS ACCEPTANCE

Overhead Door Corporation.

ACCEPTANCE NO: 01-0227.04

APPROVED: APR 19 2001

EXPIRES: 03/26/2006

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A DRAWINGS:

1. Drawing prepared by Overhead Door, titled "Series 610 Rolling Service Door Dade County", Drawing No. D-307635, dated 02/28/94 & 04/23/94 with latest revision on 02/20/98, sheets 1 through 2 of 2, signed and sealed by L. G. Krupke, PE.

B TEST:

1. Test report on Uniform Static Air Pressure Test on a "Rolling Service Door", prepared by Hurricane Engineering Testing Inc., report # HETI 94-366, dated 11/08/94, signed and sealed by H. M. Medina, PE.
2. Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test on a "Steel Rolling Service Door", prepared by Construction Research Laboratory, Inc., report # CRL 6066B, dated 06/24/94, signed and sealed by V. Tolat, PE.
3. Revision to Test report No. CRL 6066A, dated 09/01/94, signed and sealed by V. Tolat, PE.
4. Test report on Force Entry Test, prepared by Hurricane Engineering Testing, Inc., report No. HETI 94-385, dated 11/08/94, signed and sealed by H. M. Medina, PE.

C CALCULATIONS:

1. Calculations prepared by Overhead Door Corporation, dated 08/02/94 & 08/09/94, sheets 2 of 2 of drawing # D 307635, signed and sealed by L. G. Krupke, PE. on 02/20/98.

D STATEMENTS:

1. No change and yield strength compliance letter issued by Overhead Door Company on 02/13/98, signed by J. D. Faw and signed and sealed by L.G. Krupke, PE.

E. MATERIAL CERTIFICATION.

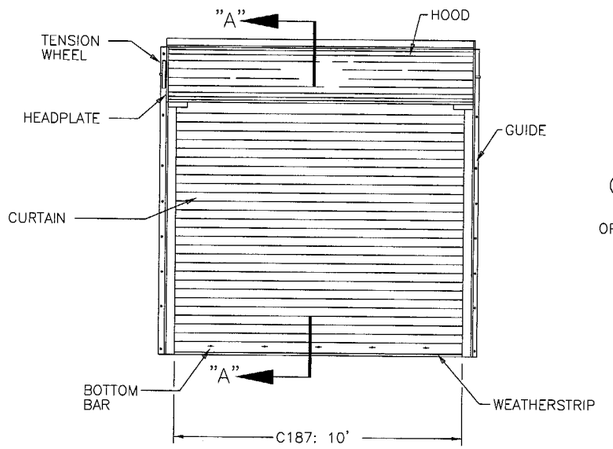
1. Test report on Tensile Test from "Overhead Commercial Door" prepared by Hurricane Engineering & Testing, Inc., report No. HETI 01-T1007, dated 01/30/01, signed and sealed by H. M. Medina, PE.

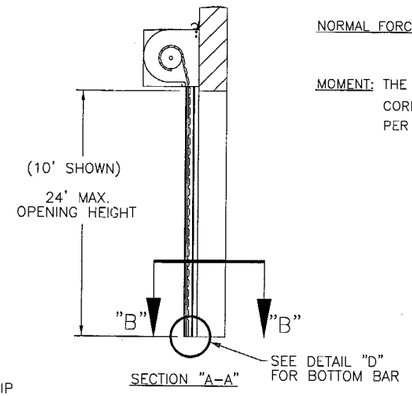
Candido Font, PE, Sr. Product Control Examiner
Product Control Division

NOTES

1. (−W/L) = NEGATIVE WINDLOAD
   (+W/L) = POSITIVE WINDLOAD
2. WALL ANGLES MAY BE WELDED TO JAMB. PLUG WELDS IN THE WALL SLOTS OR ALTERNATE WELDS SUFFICIENT TO HOLD THE LOADS SHOWN ON THE "DOOR SIZE REFERENCE SUMMARY CHART".
3. RATED DESIGN LOAD ±50 PSF.
4. CURTAIN MATERIAL: ASTM A−446, GRADE C
   GUIDE MATERIAL: ASTM A−36
5. CURTAIN MATERIAL LESS THAN 20 GAUGE SHALL BE GALVANIZED ACCORDING TO ASTM A−525 TO G90 OR AN EQUIVALENT SURFACE COATING APPROVED BY THE DADE COUNTY BUILDING CODE COMPLIANCE OFFICE.

REVISIONS			
LETTER	DESCRIPTION	DATE	APPROVAL
E	REV PER ECO 31178	3/31/95	JB
F	REV PER ECO 31189	5/12/95	JB
G	REV PER EN 10127	2/20/96	DK



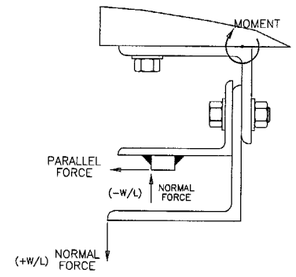


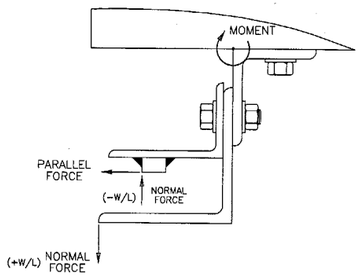
SECTION "A−A"

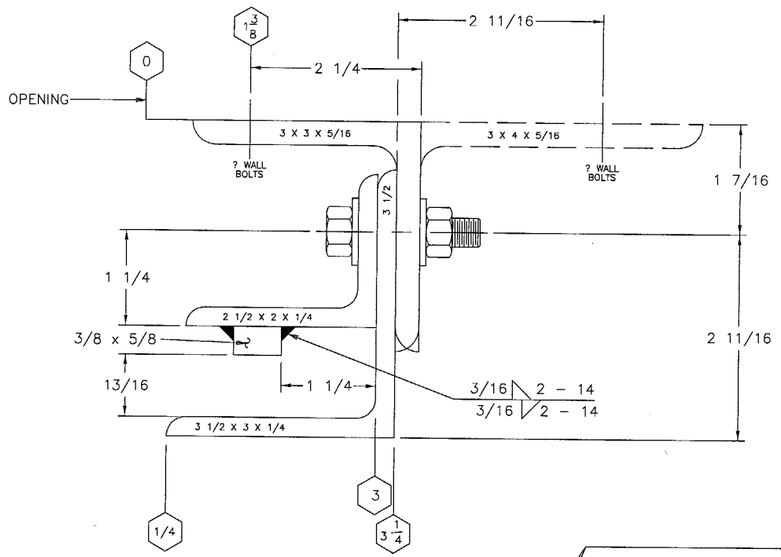
PARALLEL FORCE: THE CATENARY FORCE OF THE CURTAIN APPLIED TO THE WINDBAR IN POUNDS PER FOOT OF HEIGHT. SEE T_E IN CALCULATIONS.

NORMAL FORCE: THE FORCE NORMAL TO THE DOOR OPENING IN POUNDS PER FOOT OF HEIGHT. SEE T_F IN CALCULATIONS.

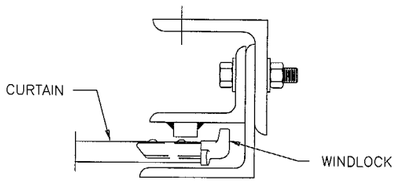
MOMENT: THE RESOLUTION OF THE PARALLEL & NORMAL FORCES TO A POINT CORRESPONDING TO THE HEEL OF THE WALL ANGLE IN INCH/POUNDS PER FOOT OF DOOR HEIGHT. SEE M_R IN CALCULATIONS.



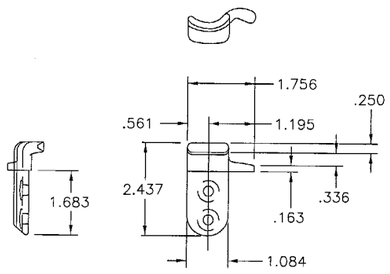




SECTION "B−B"
C−187 GUIDE



WINDLOCK/WINDBAR RELATIONSHIP DETAIL



CONTINUOUS WINDLOCK DETAIL

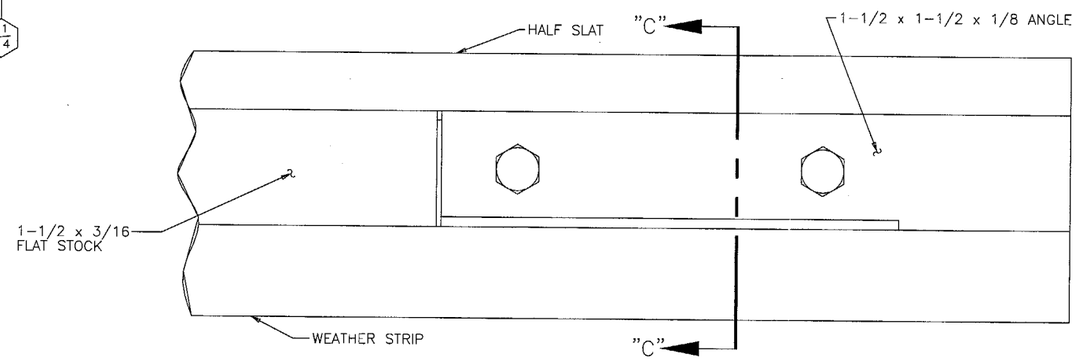
C−187 − DOOR SIZE REF. SUMMARY

	LOADS *		
	22 GA **	20 GA	18 GA
MOMENT	2540	2370	1970
NORMAL	250	250	250
PARALLEL	655	600	470

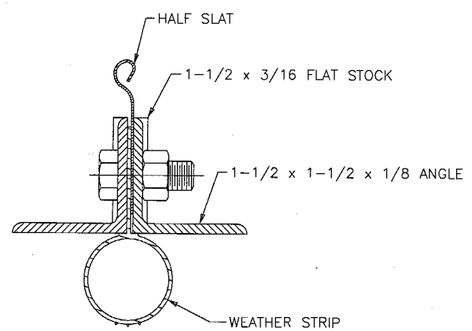
* LOADS − PER FOOT OF HEIGHT

	ASSEMBLY BOLT	WALL BOLT STEEL JAMB	WALL BOLT * CONCRETE JAMB
C−187	3/8" GRADE 5, 10" O.C.	3/8" GRADE 5, 12" O.C.	1/2" X 3 3/4" RAWL BOLT, 12" O.C.

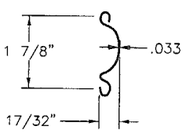
* 2000 PSI MINIMUM & 6" MINIMUM EDGE DISTANCE



DETAIL "D"
BOTTOM BAR



SECTION "C−C"



C−187 SLAT
GAUGE OPTIONS: 22 **, 20, 18
** TESTED IN ACCORDANCE WITH DADE COUNTY PROTOCOLS PA 201−94, PA 202−94, AND PA 203−94

LeROY G. KRUPKE, P.E. #36580
2-14-01

OVERHEAD DOOR CORPORATION
1900 CROWN DRIVE
FARMERS BRANCH, TEXAS 75234

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE APR 19 2001
BY
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01−0227.04

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES; TOLERANCES ON
DECIMAL DIMENSIONS: .XX= ± .03, .XXX= ± .005
HOLE DIAMETERS: UNDER .251 +.004−.003; .251 TO .500 +.006−.003; OVER .500 +.008−.003
ANGLES ± 0° 30'
FRACTIONS ± 1/16"

OVERHEAD DOOR the original since 1921 DALLAS, TEXAS
MATERIAL: 4
APPLIED FINISH: 25
UNIT OF MEASURE: N/A

	NAME	DATE
DRAWN BY:	T. SHELTON	2/28/94
CHECKED BY:	PE VESSELS	4/23/94
APPROVED BY:	T. SHELTON	4/23/94

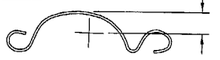
DRAWING TITLE: SERIES 610, ROLLING SERVICE DOOR DADE COUNTY
DRAWING NUMBER: D−307635
SCALE: NONE
SHEET 1 OF 2

NOTES

REVISIONS			
LETTER	DESCRIPTION	DATE	APPROVAL
E	REV PER ECO 31178	3/31/95	JB
F	REV PER ECO 31189	3/31/95	JB
G	REV PER EN 10127		

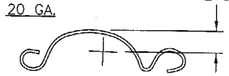
CALCULATIONS:

22 GA. .275



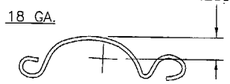
Ixx = 0.0028
Area = 0.1021

20 GA. .278



Ixx = 0.0033
Area = 0.1227

18 GA. .285



Ixx = 0.0045
Area = 0.1606

CURTAIN SLAT PITCH = 1.90 IN. OR 6.316 SLATS PER FOOT, PROPERTIES ON A PER FOOT BASIS:

	I(IN⁴)	A(IN²)	C(IN)
22 GA.	0.0177	0.6448	0.275
20 GA.	0.0208	0.7750	0.278
18 GA.	0.0284	1.0143	0.285

CALCULATIONS SHOWN FOR 22 GA. SLAT.

WINDLOCK SLIP DISTANCE = 0.625 IN./SIDE

W = DOOR WIDTH

W = 10 FT.

D = CURTAIN DEFLECTION

$D = [(\frac{2625 \cdot W}{272})(\text{WINDLOCK SLIP})]^{1/2}$

$D = [(\frac{2625 \cdot 10}{272})(0.625)]^{1/2}$

D = 7.76 IN.

S_Y = YIELD STRESS OF SLAT MATERIAL

S_Y = 40,000 PSI

E = MODULUS OF ELASTICITY

E = 29,000,000 PSI

Q_B = WINDLOAD HELD IN BENDING

$Q_B = \frac{2EID}{45W^4}$ OR $\frac{2S_YI}{3W^2C}$ (LESSER VALUE)

$Q_B = \frac{2(29,000,000)(0.0177)(7.76)}{45(10)^4}$

Q_B = 17.70 PSF

$Q_B = \frac{2(40,000)(0.0177)}{3(10^2)(0.275)}$

Q_B = 17.16

Q = 50 PSF

Q_T = WINDLOAD HELD IN TENSION

$Q_T = Q - Q_B$

$Q_T = 50 - 17.16$

Q_T = 32.84 PSF

$T_E = \frac{3Q_T \cdot W^2}{2D}[1 + \frac{D^2}{9W^2}]^{1/2}$

T_E = 655 LB/FT.

T_F = THRUST LOAD ON GUIDES PER FOOT OF HEIGHT.

$T_F = \frac{Q2W}{2}$

T_F = 250 LB/FT.

T_S = TENSION/SLAT

$T_S = 655/6.316$

T_S = 104 LB/SLAT

M_R = MAXIMUM RESULTANT MOMENT APPLIED TO JAMB

$M_R = 655(3.063)+250(2.125)$

M_R = 2540 IN·LB

RIVETS

DESCRIPTION: SEMI-TUBULAR OVAL HEAD.

MATERIAL: LOW CARBON STEEL, ZINC OR CADMIUM PLATED.

SIZE: 3/16 IN. DIA. X 3/8 IN. LONG

A_R = CROSS SECTIONAL AREA/RIVET

$A_R = \frac{\pi \cdot D^2}{4}$

A_R = 0.027 IN²

S_S = SHEAR STRESS ACROSS TWO END RIVETS

$S_S = T_S/(2 \cdot A_R)$

$S_S = 104/(2 \cdot 0.027)$

S_S = 1925 PSI

WINDBAR WELDS

A_W = AREA OF WELD

A_W = LENGTH·FILLET WIDTH

$A_W = (2)(0.1875)$

A_W = 0.375 IN²

S_W = SHEAR STRESS ACROSS WELD

$S_W = (7 \text{ IN})(655 \text{ LB/FT})(1 \text{ FT}/12 \text{ IN})/(0.375 \text{ IN}^2)$

S_W = 1020 PSI

WALL ATTACHMENT BOLTS

STEEL JAMB–POSITIVE WINDLOAD

R_B = WALL ATTACHMENT BOLT REACTION

$R_B = [655(3.063)-250(0.313)]/0.75$

R_B = 2570 LB.

STEEL JAMB–NEGATIVE WINDLOAD

$R_B = [655(3.063)+250(-0.563)]/0.75$

R_B = 2490 LB.

CONCRETE JAMB–POSITIVE WINDLOAD

$R_B = (16/12)[655(3.063)-250(3)]/2$

R_B = 840 LB.

CONCRETE JAMB–NEGATIVE WINDLOAD

$R_B = (16/12)[655(3.063)+250(2.125)]/2$

R_B = 1690 LB.

LeRoy G. Krupke
2-14-01

OVERHEAD DOOR CORPORATION
1900 CROWN DRIVE
FARMERS BRANCH, TEXAS 75234

LeROY G. KRUPKE, P.E. #36580

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
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UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES:TOLERANCES ON
DECIMAL DIMENSIONS: .XX± .03, .XXX± .005
HOLE DIAMETERS: UNDER .251+.004-.003, .251 TO .500+.006-.003, OVER .500+.008-.003
ANGLES ± 0° 30'
FRACTIONS ± 1/16"

OVERHEAD DOOR the original since 1921 DALLAS, TEXAS
MATERIAL: 4
APPLIED FINISH: 5
UNIT OF MEASURE: N/A

	NAME	DATE
DRAWN BY:	G.J. MOORE	8/2/94
CHECKED BY:	ADA JOHNSON	8/9/94
APPROVED BY:	T. SHELTON	8/9/94

DRAWING TITLE: SERIES 610, ROLLING SERVICE DOOR DADE COUNTY
DRAWING NUMBER D-307635
SCALE: NONE
SHEET 2 OF 2