

STRUCTURAL NOTES

1- ELEVATION

FINISH FLOOR ELEVATION (SEE PLAN).

2- CONCRETE

A- COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS : SLABS ON FILL: ---B- TEST: A MINIMUM OF 7 CONCRETE SPECIMENS SHALL BE TAKEN FROM EACH 50 CU. YD. OR PORTION THEREOF, SPECIMENS SHALL BE TESTED ACCORDING TO ASTM C-39, TWO AT 3 DAYS, ONE AT 1, AND THREE AT 28 AND ONE HELD IN RESERVE. C- GROUT TO BE TESTED AT LEAST ONCE PER DAY OR EVERY 50 CU. YDS. D- COVER :CONCRETE DEPOSITED AGAINST THE GROUND FORMED CONCRETE IN CONTACT WITH THE GROUND BEAMS & COLUMN ____ SLABS: EXTERIOR -

3- SLAB ON FILL: PLACED ACCORDING TO ACI 302

A- <u>JOINTS :</u>

A-1: ISOLATION JOINTS MUST BE USED AT JUNCTIONS WITH WALLS AND COLUMNS, USE 1/2" THICK PREMOLDED JOINTS FULL DEPTH OF SLAB.

A-2: CONTROL JOINTS SPACED AT CENTERLINE OF COLUMN LINES. PROVIDE INTERMEDIATE JOINTS IF COLUMN SPACING IS GREATER THAN 30 FT. IN SIDEWALKS PROVIDE TOOLED JOINTS SPACED AT INTERVALS EQUAL TO THE WIDTH OF THE SLAB. 4" SLABS I" DEEP TOOLED

JOINTS MUST BE SAWED BEFORE 24 HRS. AFTER CONCRETING.

A-3: CONSTRUCTION JOINTS MUST BE PLACED IN THE SLAB WHERE BUILDING EXPANSION JOINTS ARE SHOWN AND WHERE CONTROL JOINTS ARE SHOWN. WHEN CONCRETING OPERATIONS ARE CONCLUDED FOR THE DAY, CONSTRUCTION JOINTS SHALL BE FORMED WITH BURKE KEYED KOLD METAL JOINT FORM OR APPROVED EQUAL.

B- <u>VAPOR BARRIERS</u>

WATERPROOF MEMBRANES (OVERLAPPED 6" AT JOINTS) WITH A PERMEANCE OF LESS THAN 0.3 PERMS IN ACCORDANCE WITH ASTM E-96 SHALL BE PROVIDED UNDER INTERIOR SLABS. C- WHERE NO YAPOR BARRIER IS USED THE SUBGRADE MUST BE DAMPENED WITH WATER IN ADVANCE OF CONCRETING. NO FREE WATER STANDING ON THE SUBGRADE NOR ANY MUDDY

D-ANY STRUCTURAL MEMBER PENETRATING SLABS ON FILL IS TO BE ISOLATED WITH 1/2' THICK PRE-MOLDED JOINT FILLER COMPLYING WITH ASTM D-1752 TYPE I.

NO PREMATURE FINISHING SHALL BE ALLOWED. IMMEDIATELY FOLLOWING FLOATING, TROWELING WITH STEEL TROWELS SHOULD BE COMMENCED IF REQUIRED. BROOMING SHALL BE DONE AFTER THE STEEL TROWELING OPERATION. SLAB FINISHES (UNLESS OTHERWISE NOTED BY ARCHITECT) :

OUTSIDE SLABS ---- BROOMED

4- REINFORCING STEEL :

A- REINFORCING BARS CONFORMING TO ASTM A-615 GRADE 60, INCLUDING COL. 4 BEAM TIES. B- WELDED WIRE FABRIC CONFORMING TO ASTM A-185 AND SUPPORTED ON SLAB BOLSTERS

SPACED @ 3'-Ø" 0/C. C- FABRICATION AND DETAILING ACCORDING TO ACI-315.

THE STRUCTURE ABOVE BEING POURED.

D- ALL ACCESSORIES TO HAVE UPTURNED LEGS AND BE PLASTIC DIPPED AFTER FABRICATION. E- IN CORROSIVE ENVIROMMENTS EPOXY COAT OR GALVANIZE ALL TOP BARS IN EXPOSED BALCONIES & WALKWAYS.

5- MASONRY :

A-BEARING: MASONRY SHOWN IN PLAN SHALL BE ERECTED PRIOR TO

C- MORTAR: CONFORMING TO ASTM C-270, TYPE "M" (2,500 PSI).

D- PROVIDE DOVETAIL ANCHORS AT ALL INTERSECTIONS OF NON-BEARING MASONRY WITH STRUCTURAL CONCRETE COLUMNS AND WALLS.

6- SOIL COMPACTION

FILL AND BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95 % OF THE MAXIMUM DENSITY AT OPTIMUM MOISTURE AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D-1557)

7- COORDINATION :

COORDINATE ALL DIMENSIONS, ELEVATIONS & OPENINGS WITH ARCHITECTURAL, ELECTRICAL & MECHANICAL DRAWINGS, REPORT ANY DISCREPANCIES TO OUR OFFICE.

8- OWNER, ARCHITECT AND CONTRACTOR NOTE

CHECKING OF SHOP DRAWINGS AND INSPECTIONS OF REINFORCEMENT IN THE FIELD ARE REQUIRED IF 19 OFFICE 19 TO BE HELD RESPONSIBLE FOR THE STRUCTURAL ADEQUACY OF THE CONSTRUCTED BUILDING.

9- SHORING, RE-SHORING AND TEMPORARY BRACING :

ALL SHORING, RE-SHORING AND TEMPORARY BRACING REQUIRED IN THIS PROJECT IS TO BE DESIGNED BY A FLORIDA REGISTERED ENGINEER WHO SPECIALIZES IN FORM WORK/TEMPORARY BRACING DESIGN AND WHO HAS BEEN HIRED BY THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR IN THE ULTIMATE RESPONSIBLE PARTY FOR SHORING, RE-SHORING AND TEMPORARY BRACING REQUIRED ON THIS PROJECT AND MUST SATISFY HIMSELF OF THE ADEQUACY OF THE INSTALLATION OF THESE ITEMS AT ALL TIMES.

IN THE SPECIFIC CASE OF POURED SLABS, IT IS HIGHLY RECOMMENDED THAT THE GENERAL CONTRACTOR SECURE A CERTIFICATION OF THE INSTALLED SHORING FROM THE SHORING DESIGNER OR HIS AGENT PRIOR TO THE PLACEMENT OF CONCRETE.

10- SAFETY, OSHA AND LABOR LAWS

AREA OUTSIDE OF HIS AREA OF EXPERTISE.

THE STRUCTURAL ENGINEER OF RECORD DOES NOT POSSES, NOR PRESSUMES TO POSSES ANY KNOWLEDGE OR EXPERIRTISE IN MATTERS RELATING TO JOB SITE EMPLOYEE SAFETY,

OSHA OR LABOR LAW REQUIREMENTS FOR A CONSTRUCTION PROJECT. SAFETY AND COMPLIANCE WITH OGHA AND LABOR LAWS IS THE ABSOLUTE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THOSE CONSULTANTS HE HIRES TO ADDRESS THESE MATTERS. THE STRUCTURAL ENGINEER OF RECORD SPECIALIZES IN STRUCTURAL DESIGN ONLY AND THE

BOARD OF PROFESSIONAL REGULATION FORBIDS HIM FROM ASSUMING RESPONSIBILITY IN ANY

11- APPLICABLE CODES

ALTHOUGH THE ENGINEER OF RECORD HAS STRIVED TO MEET ALL APPLICABLE CODE AND LOCAL ORDINANCE REQUIREMENTS, THE CONTRACTOR IS STILL RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES AND ORDNANCES IN THE EVENT OF CONFLICT OR OVERSIGHT IN THESE DRAWINGS, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICT OR DISCREPANCY ENCOUNTERED SO THAT APPROPIATE REMEDIES MAY BE UNDERTAKEN.

12 - <u>LIVE LOADS :</u>

30 PSF ROOF AREAS 100 PSF FLOOR AREAS

13- WIND DESIGN:

THIS STRUCTURE HAS BEEN DESIGNED TO WITHSTAND THE PRESSURES GENERATED BY 146 MPH WINDS IN COMPLIANCE WITH THE FLORIDA BUILDING CODE & ASCE 7-02 ASCE : 7-10

WIND SPEED: 175 MPH

EXPOSURE: C USE FACTOR:

GCP.: 18 ± 14- CODES USED IN DESIGN:

2010 FLORIDA BUILDING CODE HYHZ, AS AMMENDED ACI 318-08: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY. ACI 530/530. I-08: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES AND RELATED COMMENTARIES.

ASCE 1-10: MINIMUM DESIGN LOADS FOR BUILDINGS AND STRUCTURES.

15 - CONTRACTOR COMPLIANCE:

IN ADDITION TO THE ABOVE CONTRACTOR MUST COMPLY AS A MINIMUM WITH THE FALLOWING STANDARDS FOR CONCRETE CONSTRUCTION. ACI 301-05: SPECIFICATIONS FOR STRUCTURAL CONCRETE ACI 304R-00: GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE.

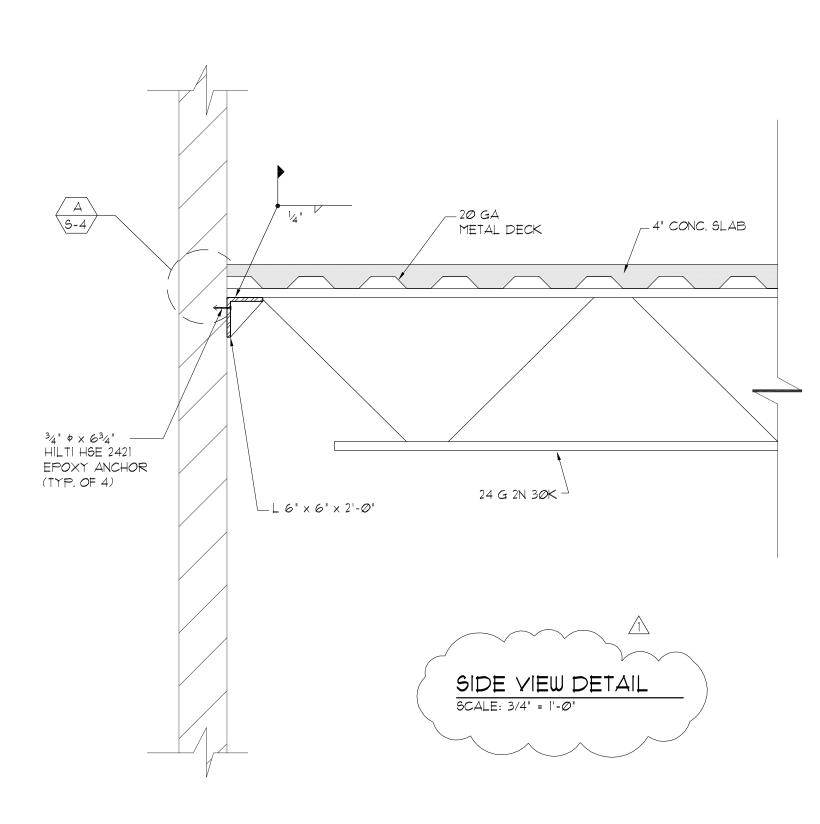
ACI 305-99: HOT WATHER CONCRETING

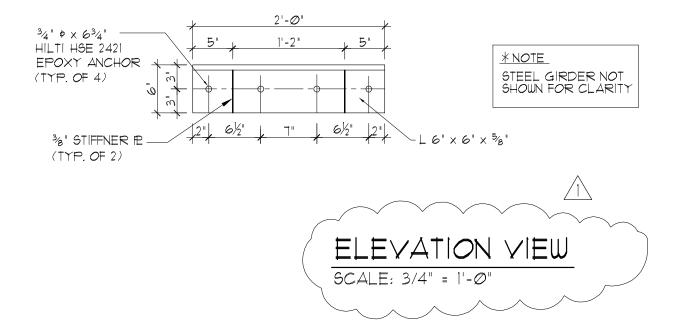
ACI 308R-01: GUIDE TO CURING CONCRETE. ACI 309R-05: GUIDE FOR CONSOLIDATING CONCRETE.

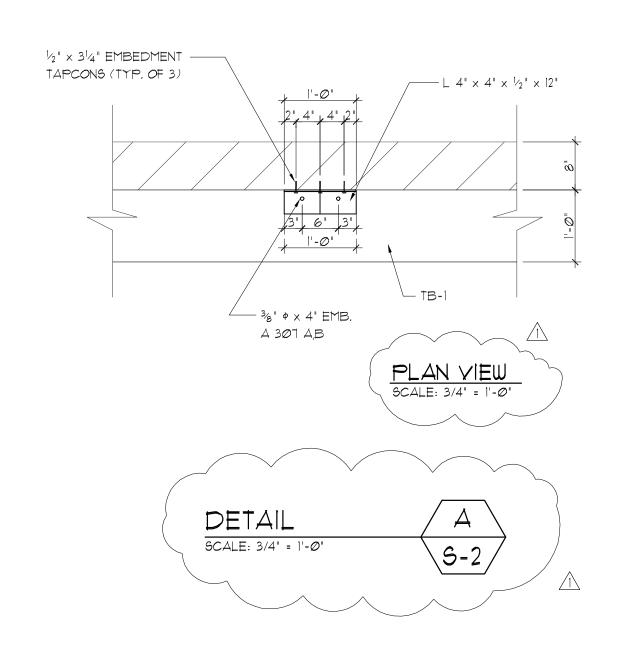
16 - SOIL BEARING :

FOOTINGS HAVE BEEN DESIGNED FOR A BEARING CAPACITY OF 1500 PSF BOTTOM OF FOOTING TO BEAR ON SANDY LIMEROCK OR SAND. VISUAL INSPECTION OF THE SITE INDICATES SOILS CAPABLE OF SAFELY SUPPORTING THE DESIGN SOIL PRESSURE USED IN THE DESIGN OF THE FOUNDATIONS.

MIAMI DADE COUNTY, FLORIDA JURISDICTION REQUIREMENT: THE GEOTECHNICAL ENGINEER IS TO SUBMIT TO THE CITY OF MIAMI A SIGNED AND SEALED LETTER ATTESTING THAT THE SITE AND EXCAYATIONS HAVE BEEN OBSERVED AND THE FOUNDATION CONDITIONS ARE SIMILAR TO THOSE UPON WHICH THE DESIGN IS BASED.







GROUND FLOOR SLAB NOTES:

1- FLOOR SLAB HAS A 4" CONC. SLAB ON WELL COMPACTED FILL OVER A POLYETHYLENE REINF. W/ 6×6 - W 1, $4\times$ W 1, $4\times$ WWF. (U.ON.) LAPPED 6" MIN. (WWF SHOULD BE PLACED 2" BELOW THE TOP OF THE SLAB IN ORDER TO BE EFFECTIVE) 2- PROVIDE SAW CUT JOINTS (C.J.) AS INDICATED ON PLAN

3- COORDINATE ALL FLOOR SLOPES AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS. 4- CENTERLINE OF COLUMN OR WALL IS CENTERLINE OF FOOTING. (U.O.N.)

5- TOP OF FOOTING ELEVATION: (MONOLITHIC) (AS PER FBC 1819.4.5 TOP OF PERIMETER FOOTINGS SHALL BE A MIN. OF 8" BELOW

MASONRY NOTES:

OF THE ABOVE REQUIREMENTS.

FINISH GRADE)

1- PROVIDE * 9 ga. LADDER TYPE HORIZONTAL MASONRY REINF. @ 16" O/C. IN ALL MASONRY WALLS (U.O.N.).

2- SPLICE VERTICAL MASONRY WALL REINFORCEMENT 48 BAR DIAMETERS

AS FOLLOWS: FOR # 5 BARS: 30" 3- AT EITHER SIDE OF OPENINGS BETWEEN 3'-0" AND 4'-0" INCLUSIVE PROVIDE 2 # 5 VERT. IN GROUTED CELL (U.O.N) FOR OPENINGS FROM 4'-0" TO 6'-6" 4- ALL MASONRY IN THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE W/ ACI 530-02 AND THE FLORIDA BUILDING CODE. ALL MASONRY IN THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH

5- MASONRY UNITS TO COMPLY WITH ASTM C-90 AND HAVE A MIN FIM AND A NET AREA COMPRESSIVE STRENGHT (N.A.C.S.) AS FOLLOWS: FOUNDATION TO THIRD FLOOR: F'M=2000 PSI AND N.A.C/S:=2800 PSI. THIRD FLOOR TO M.R. ROOF: F'M = 1500 PSI AND N.A.C.S. = 1900 PSI. CONTRACTOR MUST PROVIDE WRITTEN CONFIRMATION FROM THE MASONRY MANUF.

6- GROUT TO HAVE A MIN. F'c=3000 P\$I AT 28 DAY\$ WITH A \$LUMP OF 8" +/- 1" AND TO BE POURED IN 4'-0" LIFTS. 1- USE BAR SPACERS POSITIONERS TO MANTAIN MASONRY REINF. IN PROPER LOCATION AND VERTICAL ALIGNMENT. 8- PROVIDE STANDARD HOOKS AT FOUNDATIONS AND TOP TIE BEAM.

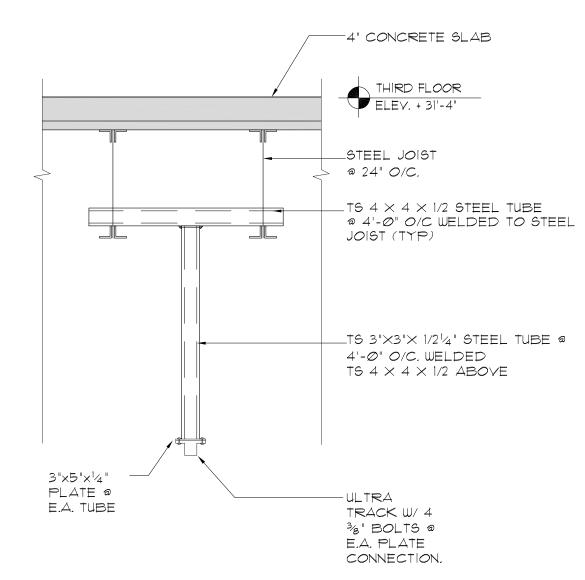
BEAM SCHEDULE											
MADV	ELEY.	SIZE	REINFORCEMENT					STIRRUPS		REMARKS	
MARK			BOT.	TOP	U	Ш		No.	SPACING EACH END	REHARRS	
TB-1	VARIES	8 × 12	2 # 5	2 # 5				3 🗖	4 @ 12", BAL @ 48'		

" TIE BEAM NOTE: DROP BOTTOM OF ALL TIE BEAMS AS REQUIRED OVER OPENINGS AND ADD 2 * 5 HOR, FOR EACH 12" OF VERTICAL DROP. IN OPENINGS LARGER THAN 6'-6" ADD #13" @ 12" O/C.

PROVIDE $2 * 5 (30" \times 30")$ CORNER BARS AT EVERY CONC. TIE BEAM OUTSIDE CORNER OR CHANGE IN DIRECTION. IN MASONRY TIE BEAMS PROVIDE CORNER BARS (36" X 36") OF THE SAME QUANTITY AND SIZE AS THE TIE BEAM REINF.

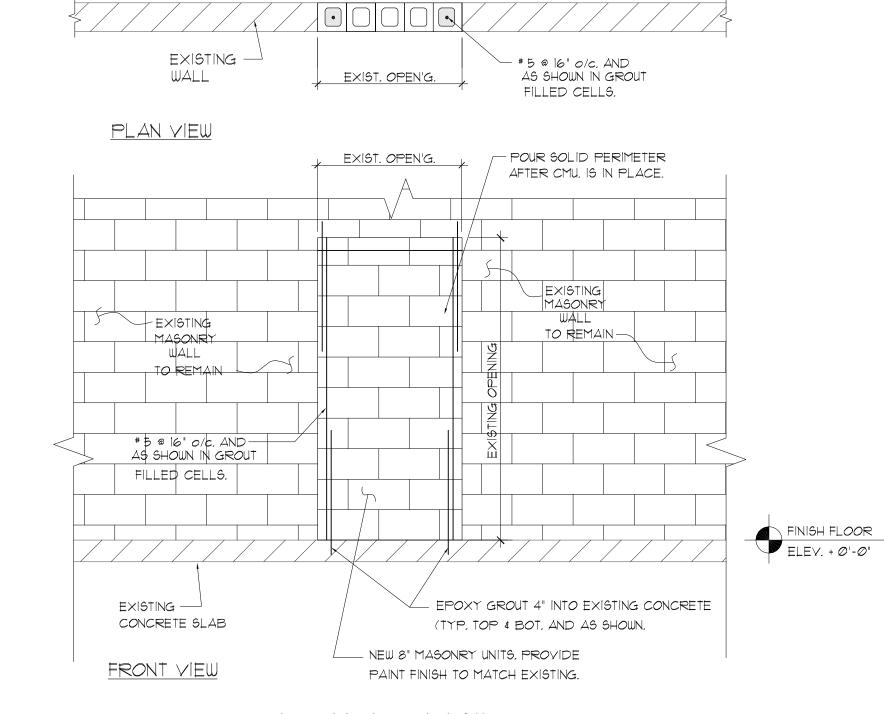
FOOTING SCHEDULE									
	GIZE	REINFO							
MARK	SIZE	LONG.	TRANS.						
WF-16 (M)	16" × 12" CONT.	2 # 5	-	MONOLITHIC					

PROVIDE 36" x 36" CORNER BARS AT ALL CONT. FOOTING CORNERS AND INTERSECTIONS. SPLICE REINF. 36 BAR DIAMETERS (MIN.)

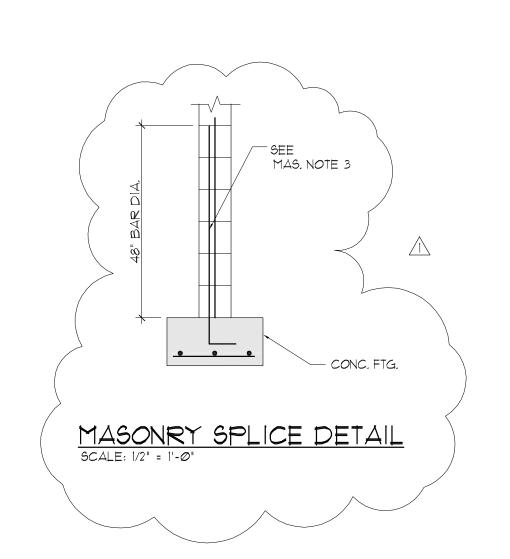


NOTE: WHERE ASSEMBLY DOES NOT LAND AT A JOIST PANEL POINT ADD (2) L 1" \times 1" \times 1/8" (ONE EA SIDE). WELDED TO TOP & BOTT CHORDS OF JOIST.

TYPICAL BALAZS TRACK SUPPORT AT 3RD FLOOR



BLOCK-UP DETAIL



CAUTION: DO NOT SCALE DRAWINGS. DIMENSIONS NOTED ON PLAN CONTROL OVER SCALE AND MUST BE CORDINATED WITH ARCHITECTURAL DWGS. THESE PLANS ARE FOR BUILDING DEPARTMENT REVIEW. THEY ARE NOT TO BE CONSTRUED AS FINAL CONSTRUCTION

DOCUMENTS UNTIL ALL BUILDING DEPARTMENT APPROVALS ARE OBTAINED AND COMMENTS INCORPORATED INTO THESE DWGS.

Pereira

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REVISIONS BY

BLDG. DEPT. P.I.C.

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