

# 2017 World of Concrete Las Vegas Convention Center



Attendance this year was down compared to last year (mainly because of Con/Expo this year). The attendance was recorded as 50,770 visitors that registered. However, from talking to several vendors and contractors everyone has seen an increase in business and are looking forward to 2017 year.

ECP had an excellent show even with the down attendance. We got to visit several of our existing contractors and several new installers.

If you have never been to the World of Concrete, you might want to plan a trip. It is amazing to see all the different products available in one location.



A & N Electric Cooperative Case Study - Tangier, VA Lattice Tower Structure - See Inside



Water Channel and Cove Channel Product Spotlight – See Inside



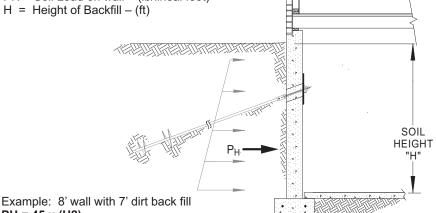
2017 WOC Product Spotlight – Back Cover

## **ECP** Reminder Tips

#### How to calculate Hydrostatic Pressure on a Basement Wall?

In the ECP Ninth Edition pages 28-31 we discuss the loads on a basement walls as well as a retaining wall. Basement wall designs that see hydrostatic pressure would use the below formula:

PH = 45 x (H2) (Water is present)
PH = Soil Load on wall – (lb/lineal foot)
H = Height of Backfill – (ft)



#### **Upcoming 2017 - 2018 Events**

#### NFRA 2017 Annual Conference April 19-21, 2017

Hilton Houston NASA Clear Lake Houston, TX

# Basement Health Association Regional Meeting

June 1-2, 2017 Gaylord Opryland Resort Nashville, TN

#### **TEI Hollow Bar Drill School**

June 6-8, 2017 Montrose, CO

 $PH = 45 \times (H2)$ 

 $PH = 45 \times (72)$ 

PH = 2205 lbs/ lineal foot

#### DFI Helical Pile & Tieback Seminar

September 2017 Montreal, QC, Canada

## ECP Building Blocks Workshop 2017

September 2017 Kansas City, MO

#### DFI 41st Annual Conference on Deep Foundations

October 24-27, 2017 New Orleans Marriott New Orleans, LA

# NAHB International Builders Show

January 9-11, 2018 Orange County Convention Center Orlando, FL

#### **World of Concrete 2018**

Exhibits: January 23-26, 2018 Seminars: January 22-26, 2018 Las Vegas Convention Center Las Vegas, NV

#### NARI Remodeling EXPO

January 19-21, 2018 Madison Marriott Convention Center Middleton, WI

#### 2016 Building Blocks Workshop Vendors

#### Carbon Fiber

Rhino Carbon Fiber Luke Secrest Office: 614-264-5462 Isecrest@rhinocarbonfiber.com

#### **Financing**

GreenSky Credit
Reid Benjamin
Office: 404-400-2980
reid.benjamin@greenskycredit.com

#### **Gear Drives**

Superior Truck Equipment, Inc (ESKRIDGE) Gina Dipperschmidt Office: 913-302-1301 gd@superiortruck.com

#### **Hydraulics** Enerpac

Russ Snygg Office: 515-490-0261 Russ.snygg@enerpac.com

#### **Power Tools**

Hilti Michael Judin Office: 800-879-8000 michael.judin@hilti.com

#### **Software**

Foundation Accelerator Brad Huxol Office: 816-803-4554

brad@foundationaccelerator.com

#### Sump Pumps

Pro Series Pumps Preston Alper Office: 847-732-4235 preston@glentronics.com

#### Website Design

Websites to Impress Austin Scott

Office: 712-792-4427

#### **Notable Basketball Quotes**

If you want to go fast-go alone; If you want to go far, you have to go with others"

-Dale Brown- former LSU Coach

Failure is good. Its fertilizer. Everything I've learned about coaching I've learned from mistakes.

- Rick Pitino - Louisville Coach

If what you have done yesterday still looks big to you. You haven't done much today.

-Mike Krzyzewski- Duke Coach

Loyalty is not unilateral. You have to give it to receive it.

- Pat Summitt - Former Tennessee Women's Coach

# Case History

# ECP Torque Anchors<sup>™</sup> Model DLS-863-144-14





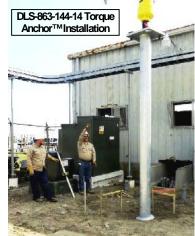
#### New 25 kV 2-Bay Distribution Structure

#### Chesapeake Bay Island - Tangier, Virginia

This small island community needed to increase electrical capacity to provide for the future needs of the homes and the Tangier Marina. The design conditions required that a new electrical equipment tower structure be constructed to support ultimate

capacities of 45 kips in compression, 34 kip tension and 31 kip lateral.

The new substation was at an elevation very close to sea level, which



offered many challenges for the new structure. These challenges included ocean wave proximity, up to 140 mph hurricane force winds and extreme ice loads of up to one-inch.

Subsurface Exploration and Geotechnical Engineering performed a soil analysis and provided foundation design recommendations. The soils at the site consisted of 2 feet of fill soil overlaying 4 feet of soft to medium sandy clays. Below the sandy clay to a depth of 31 feet was medium

compact silty sand. The geotechnical engineer recommended a foundation consisting of four 30 inch diameter concrete caissons.

The electrical utility, A&N Cooperative, found that bringing concrete to the island on a barge would cost a prohibitive \$11,000 per yard! A&N requested Power Services engineering to provided the geo-



technical soil data and the foundation loading criteria to ECP. The ECP team designed and fabricated a custom Torque Anchor™ Helical Pile foundation that would meet the design criteria, and a pile system that could be installed using an A&N line truck with torque motor. The custom ECP Torque Anchor™ piles were rotated into the soil until reaching stable soil at 12 foot depth.

The ECP helical pile system not only supports the load, the helical piles were rapidly installed at cost far less than the cost



of drilling and casting concrete! In addition, the Torque **ECP** Anchor™ Piles were immediately after ready installation for loading without the need for concrete curing time.

	Project Summary
Project:	25 kV 2-Bay Distribution Structure
Engineer:	Power Services, Raleigh, N.C.
Installer:	T & D Solutions North Carolina
Product Installed:	4 ECP DLS-863-144-14 Torque Anchor™ Tubular 8-5/8" dia. x 12' long with single 14" diameter helical plate and custom mounting)
Custom Mounting Plate:	22" Square x 1.5" thick 4 Anchor Bolts – 1-1/4" Diameter
Ultimate Design Capacity:	Compressive - 45,000 lb. Tensile - 34,000 lb. Lateral – 31,100 lb.

# **Product Spotlight ECP Cove Channel and Water Channel**

#### **Cove Channel**



#### **Properties:**

- · Comes in 250' continuous roll
- Pre-scored 10" wide x 5" tall
- Thickness .168"
- · White color
- Cove channel cap available (sold separately)

# Cove Channel Around interior perimeter under the floor

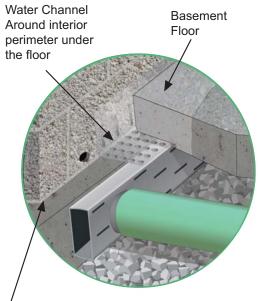
Cold joint (area where the foundation meets the footing) can allow water to penetrate from exterior of the foundation inside the basement

#### **Water Channel**



#### **Properties:**

- · Comes in 6' sections
- · Pieces are 8.5" wide
- 35 mils thick
- Made from 50% recycled materials
- Transparent for visual inspection



Cold joint
(area where the foundation
meets the footing) can allow
water to penetrate from
exterior of the foundation
inside the basement



www.medusaw.skilsaw.com

When there's concrete to conquer, MEDUSAW™ makes the job a whole lot easier. It's the world's first fully integrated worm drive saw designed specifically for scoring and cutting concrete accurately.



www.da-mite.com

When a job has no blasting specifications, use Dā-mite®, the non-explosive rock splitting mortar, to quickly and quietly break concrete, rock and more.



www.surfaceshields.com/dust-containment-wall

**Dust Shield Pro Extenable Containment Poles** 



www.accessconstructionequipment.com

Mini conveyor for moving dirt and rock into basement or crawlspace.