

Pennsylvania Precast Association

Membership Meeting

January 4th – Carlisle, Pa

Meeting called to order at 9:00 AM

- 1.) Reviewed anti-trust policy
Sign in was passed around and self-introductions were made

- 2.) Reviewed financials

Cash Balance	\$59,783.32
Receivables	\$13,800.00
Payables	\$9,953.94
Est. reserves	\$63,629.38

- 3.) Committee Membership review
 - a.) Quality Assurance and Specifications
 - b.) Manhole Standards work group
 - c.) Membership and Marketing- Open Chair
 - d.) Septic Tank Manufacturing Committee

- 4.) New 2 year term elected officers
President- Mark Taylor
Vice President- Phil Weber
Treasurer- Tom Dixon
Secretary- Rusty Fox
Past President- Pat Holleran

- 5.) Action items from November 11th meeting
 - a.) Payment for low strength concrete is in clearance transmittal within Penn DOT. Hank will get a copy from Bob Horwhat to review the language.
 - b.) Issues with insert for parapet attachment to box culverts, they are reviewing within Penn DOT and will be making changes to BC and BD standards.

- 6.) Membership & Marketing issues
 - a.) Please direct addresses to Hank for Precast Solutions magazine. These magazines can be sent out to engineers and other specifiers to educate them on the advantages of using precast concrete.
 - b.) Web site traffic continues to increase.
 - c.) NPCA affiliates Forum is at www.forum.precast.org please check it out.
 - d.) PPA is now on [Facebook](https://www.facebook.com/ppa) become a friend!

7.) Associate Spotlight

- a.) Hilti North America (www.us.hilti.com) - Daniel Wade. (Copy of presentation is attached)

8.) PA DOT Topics (Copy of presentation is attached)

- a.) BARK1 is on Level 2 as a Fabricator for epoxy bar
BARK2 is on Level 2 as a coater and Level 3 as a Fabricator of epoxy bar
BARKR is on Level 2 as a Fabricator of epoxy bar
GERD1115 is on Level 2 as a black bar manufacturer
GERD6 is on Level 2 as a Fabricator of epoxy bar
- b.) Bob Horwhat reviewed the PA DOT spec on epoxy touch up material, they will be adding a section for this to Bulletin 15 hopefully within 6 months
- c.) Manhole standards work is funded and Gannet Fleming has the work order with a verbal to proceed.
- d.) Bob Horwhat reviewed the realignment of divisions within Penn DOT

9.) Executive Director,s report

- a.) Keep your listings up to date on PPA's website.
- b.) What training or tools do you need help with? Let Hank know.
- c.) Transportation funding update and continued contact with elected officials
- d.) Note change in email addresses info@paprecast.org
- e.) Follow PPA on [Facebook](#)
- f.) www.bettersaferroads.com
- g.) A special thanks to the only retiring committee member, Jay Behney, thank you for your service.

10.) Upcoming meeting dates

- a.) PA Concrete Conference: Jan 18 – 19 at the Holiday Inn in Harrisburg, PA (Registration form is attached)
- b.) Mid Atlantic Quality Assurance Workshop: Feb 7 – 9 at Dover Downs Hotel, Dover, DE
Information and registration at: www.midatlanticqaw.com
- c.) NPCA Precast Show- March 1-3 2012 in Orlando, FL
- d.) PPA Meeting- March 7 Hotel Carlisle

11.) Comments

HILTI Hilti. Outperform. Outlast.

Hilti Inc.

Presented by: Daniel J. Wade
 Pennsylvania Precast Association
 January 2012





PPA
 Pennsylvania Precast Association

HILTI Hilti. Outperform. Outlast.

Agenda

- Overview of Hilti
- Applications
- Products
 - Chemical Anchors
 - Mechanical Anchors
 - PS1000 Ground Penetrating Radar
- Fleet Management
- Local Resources
- Q&A

www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION  2

HILTI Hilti. Outperform. Outlast.

Who is Hilti?

Hilti is a leading manufacturer and supplier of professional, quality tools and fastening systems.



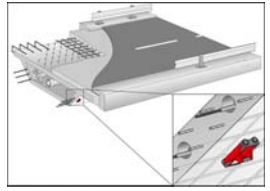
- Privately held company
- Works in 120+ countries and employs more than 20,000 people
- Is an ISO 9001/ 14001 registered manufacturer and has 9 plants
- Over 1,200 Account Managers in the US and Canada
- More than 70 Engineers & Project Managers in North America
- Hilti spends over \$180 million annually on Research & Development
- Millions of dollars of training provided at no cost to our customers every year


www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION  3

HILTI Hilti. Outperform. Outlast.

Agenda

- Overview of Hilti
- Applications
- Products
 - Chemical Anchors
 - Mechanical Anchors
 - PS1000 Ground Penetrating Radar
- Fleet Management
- Local Resources
- Q&A






www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION  4

HILTI Hilti. Outperform. Outlast.

Applications

- Flat Panel Lifting
- Shoring/Bracing
- Tilt-Up Wall
- Floor to Wall Connections
- Roof/Ceiling Connections
- Crash Barrier Fastening
- Manhole Anchorage
- Pulley/Rigging Attachments
- Sound Walls

www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION 5

HILTI Hilti. Outperform. Outlast.

Agenda

- Overview of Hilti
- Applications
- Products
 - Chemical Anchors
 - Mechanical Anchors
 - PS1000 Ground Penetrating Radar
- Fleet Management
- Local Resources
- Q&A






www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION 6

HILTI Hilti. Outperform. Outlast.

Choosing an anchor – Influencing Factors

- **Loading**
- **Anchor Diameter**
- **Steel Grade (Adhesive Anchors)**
- **Embedment Depth**
- **Concrete Strength**
- **Edge Distance (c)**
- **Anchor Spacing (s)**
- **Corrosion Resistance**
- **Fire Resistance**
- **Cracked or Uncracked C**



www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION 7

HILTI Hilti. Outperform. Outlast.

HIT Adhesive Anchoring System


	Hollow Base (Be it & Hollow block)	Fast Cure	Solid Base (Concrete & Aerial block)	Slow Cure
Site-critical	HY 20	HY 150 MAX HY 150	RE 500-SD RE 500	
Non-Site-critical		HY 10	HY 10	HFX

*Added HY 150 MAX-SD. Only IBC 2009 Approved Fast Cure Product in the Market! HY150 Regular is not produced anymore.

www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION 8


HILTI HILTI. Outperform. Outlast.


HIT RE 500-SD Epoxy Anchoring System



- The industry's first epoxy anchor system for Strength Design
- Complies with the 2003, 2006 and 2009 International Building Code
- Self-opening foil pack reduces waste

- Meets ASTM C881/AASHTO M235, Type IV epoxy standards for DOT projects
- Longer working time allows high performance fastenings to be made with large diameter rods and deep rebar embeddings, especially in warmer climates.
- Yet, cures much faster than "traditional" epoxies.




www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION  9


HILTI HILTI. Outperform. Outlast.

HIT RE-500/RE-500 SD


- Large Diameter Anchors
- Suitable for Oversized Holes, up to Twice Rod Diameter, < 3" Max (500 only)
- Wet or Submerged Conditions (up to 165 ft in depth)
- Deep Embedment (>2')
- High Cycle Fatigue
- Cored Holes




Rebar Doweling



Cored Holes



Underwater Applications

www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION  10

HILTI HILTI. Outperform. Outlast.

Specification and Installation of Post-installed Anchoring Systems

Adhesive Anchoring Systems are used in many various environments.

Therefore, different aspects must be considered during the installation:

- Temperature
- Dry or wet conditions
- Size and embedment depth
- Correct injection
- Installation direction
- Accessibility
- The Right Tools & Accessories






Appropriate Installer Training is a great way to achieve this goal


www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION  11

HILTI HILTI. Outperform. Outlast.

Basic Anchor Differences


<p><u>Mechanical Anchors</u></p> <ul style="list-style-type: none"> • Immediate Loading • High Temperature Resistance • Shock Load Performance • Low Cost Options for Static Loads • High Shear Options Available 	<p><u>Adhesive Anchors</u></p> <ul style="list-style-type: none"> • Reduced Spacing and Edge Distance Compared to Expansion Anchors • Dowelling • Flexible Embedment Depth Options • Low Cost Options for Dynamic Loads
---	--


www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION  12

HILTI HILTI. Outperform. Outlast.


Mechanical Anchors



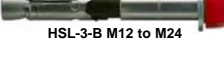
HDA-P




HSL-3 M8 to M24




HSL-3-G M8 to M20




HSL-3-B M12 to M24



Kwik Hus - EZ



Kwik Bolt 3



Kwik Bolt TZ

www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION 13

HILTI HILTI. Outperform. Outlast.

Grout Line - Multipurpose, Precision and Epoxy

Tracks & Facilities

- Civil projects
- Concrete professionals
- Energy facilities
- General contractors/ construction managers
- Industrial plants
- Ornamental steel artisans
- Steel erectors

Applications

- Baseplate filling
- Bridge repair
- Doweling/rebar
- Grouting pre-cast
- Machine pad formation
- Railings and posts
- General purpose

Solid base to build on. Construction Grouts

Hilti is proud to announce its new portfolio of Big American-compliant construction grouts for the structural design and installation communities. These three highly-engineered product solutions honor Hilti's heritage and continuing commitment to innovation and service. Our new epoxy, precision and multipurpose grouts address a spectrum of commonly encountered construction applications.

Both Hilti Multipurpose and Precision Grouts meet ASTM C-1107 (Standard Specification for Packaged Dry, Hydraulic-Cement Grout, Nonshrink) and CRD - 0521 (US Army Corps. of Engineers Specification for Non-Shrink Grout).

Hilti Epoxy Grout (EG) is a three-component, VOC- and butyl glycidyl ether-free, resin system.

Order Information

Description	Package Contents	Qty	Item No.
Epoxy Grout	65 lb bucket	1	00430008
Precision Grout	50 lb bucket	1	00430011
Precision Grout	50 lb bag, 1/2 pallet	25	00430096
Precision Grout	50 lb bag, pallet	50	00432771
Multipurpose Grout	50 lb bag, 1/2 pallet	25	00430094
Multipurpose Grout	50 lb bag, pallet	50	00432770



www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION 14

HILTI HILTI. Outperform. Outlast.

Specifiers/Engineers – Hilti offers consultative resources to keep you code compliant and up to speed

What is “or equal”?

There is no “or equal” based on just loading criteria alone.

REMEMBER:

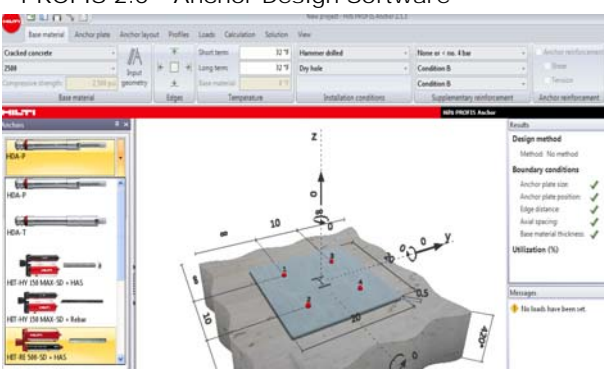
- Products vary regarding installation & service conditions
- Only properly installed anchors achieve their optimum performance
- Clarity and consistency of installation instructions and availability of training for installers on site are very important

Specification Examples Available Upon Request

www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION 15

HILTI HILTI. Outperform. Outlast.


PROFIS 2.0 – Anchor Design Software




www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION 16

HILTI Hilti. Outperform. Outlast.

PS 1000 X-Scan: First easy to use Pulse Radar detection tool

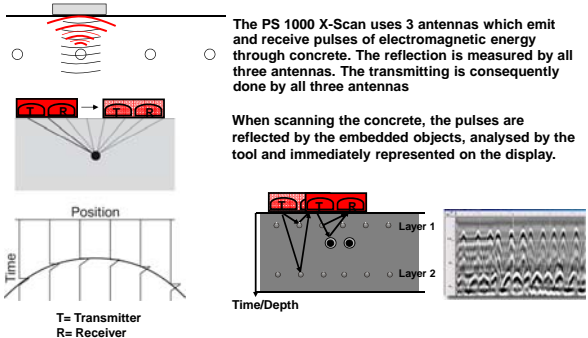


- Pulse radar based detection tool (Ground/Wall Penetrating Radar)
- Locates all kinds of objects in multiple layers up to max. 30 cm in cured concrete
- Helps users to find a safe spot to drill, core or saw
- Enables concrete structural analysis
- Provides data analysis, evaluation and report generation

www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION  17

HILTI Hilti. Outperform. Outlast.


Measuring Principle : What is Ground/Wall Penetrating Radar



The PS 1000 X-Scan uses 3 antennas which emit and receive pulses of electromagnetic energy through concrete. The reflection is measured by all three antennas. The transmitting is consequently done by all three antennas

When scanning the concrete, the pulses are reflected by the embedded objects, analysed by the tool and immediately represented on the display.

T= Transmitter
R= Receiver

www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION  18

HILTI Hilti. Outperform. Outlast.

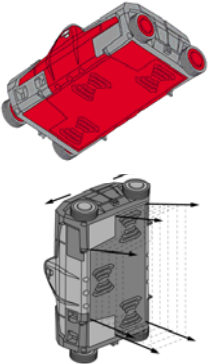
Antenna Array


PS 1000 X-Scan measures with three antennas simultaneously.

Why is three better than one?

Three antennas ensure:

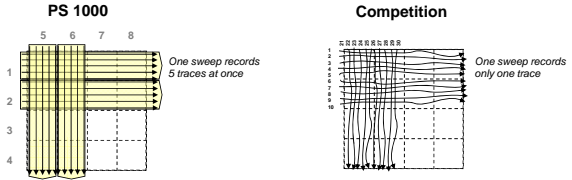
- Higher productivity
- Better data quality
- Better vertical resolution



www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION  19

HILTI Hilti. Outperform. Outlast.

Antenna array saves time and yields higher data quality




PS 1000
One sweep records 5 traces at once
A total of 8 sweeps required for an area of 600x600mm

Competition
One sweep records only one trace
A total of 40 sweeps required for an area of 600x600mm

- Better data quality/density due to fixed antenna position of array - faster recording
- Regular recording brings higher localization accuracy and allows better 3D migration
- Allows real time top view representation of the data in QS mode
- With a single antenna each trace has to be scanned manually
- Using a single antenna system one has to do 5x more sweeps for the same density of data

80% productivity gain!

www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION  20

HILTI Hilti. Outperform. Outlast.

Fleet Management: Provides Customer Advantage



HILTI


FLEET MANAGEMENT

Hilti is the only manufacturer which can offer fleet management to its customers.

Preserve capital - monthly expense payments instead of upfront investment


No more repair costs / free calibration and Lifetime service




Diagnostic center


For a fixed monthly fee, Hilti provides our customer with a new tool. During the usage time, there is only one monthly invoice for the tool that covers absolutely all costs (including repair). Plus – at the end of the usage period – the fleet will be renewed with the latest generation of Hilti High end scanners.




Pay for Use




Timely Exchange




Simply No Cost



Labeling & Tracking



Theft Coverage




Loan Service

www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION 21

HILTI Hilti. Outperform. Outlast.

Agenda

- Overview of Hilti
- Applications
- Products
 - Chemical Anchors
 - Mechanical Anchors
 - PS1000 Ground Penetrating Radar
- Fleet Management
- Local Resources
- Q&A




www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION 22

HILTI Hilti. Outperform. Outlast.

Local Resources

- Pittsburgh/Harrisburg
 - Mark Mazur – Civil Account Manager – (724) 244- 4666
 - Joe Cortese – Field Engineer – (412) 999- 8594
- Philadelphia/South NJ
 - Bryan Smith – Civil Account Manager – (215) 527- 4492
- Regional Hilti Repair Center located in Harrisburg
- National Distribution Centers located in Maryland, New Jersey and New York
- Hilti Centers located on Pittsburgh, Malvern and Philadelphia

www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION 23

HILTI Hilti. Outperform. Outlast.

Questions & Answers




Questions or to Request Information:

Daniel J. Wade
 Civil Regional Manager
 (443) 567 – 1843
 Daniel.Wade@Hilti.com

www.us.hilti.com PENNSYLVANIA PRECAST ASSOCIATION 24

January 4, 2012

PennDOT Topics




www.dot.state.pa.us

Reduced Certification (Screen/sample)

Suppliers Currently on Reduced Status

Supplier Code	Level	Mat'l Class	Mat'l Code	Manf	Fabr	Coater	Powder	Start Date
BARK1 15	Level 2	EPOXY	231	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/30/2009
	Level 3	EPOXY	231	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4/25/2011
BARK2 15	Level 2	EPOXY	231	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4/25/2011
	BARKR 15	Level 2	EPOXY	231	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
GERD1115	Level 2	BLACK	231	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2/14/2011
GERD6 15	Level 2	EPOXY	231	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6/22/2010



www.dot.state.pa.us

Epoxy coating repair materials

May 26, 2011

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Sent to All Epoxy Coated Rebar Patching Material Manufacturers

RE: Publication No. 35, Bulletin 15, Approved Construction Materials, Section 709.1 Reinforcement Steel (Epoxy Powder Manufactures). Evaluation of patching material approved for use with epoxy powder coatings listed in Bulletin 15.....


All manufacturers of epoxy powder currently approved in Bulletin 15 are hereby advised that once the Department lists approved epoxy repair materials in Bulletin 15, the powder manufacturer must have a repair material tested, approved as compatible with their powder coating, and approved in Bulletin 15 in order for that powder manufacturer to retain their listing in Bulletin 15. In consideration that some manufacturers may have to complete the entire testing and review process, **the Department will set an approval process of six (6) months from the date of receipt of this letter prior to initiating any removal actions.**



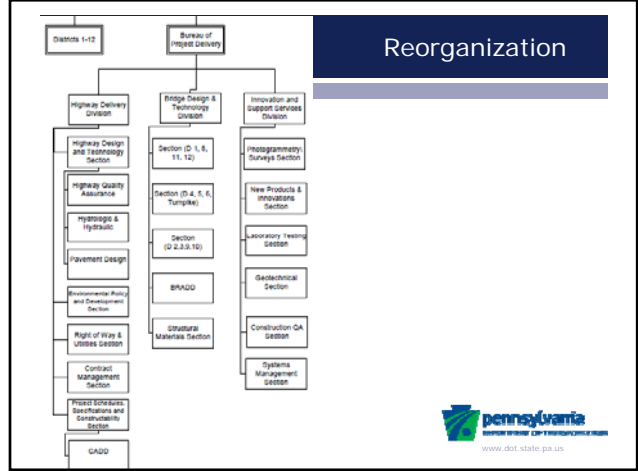
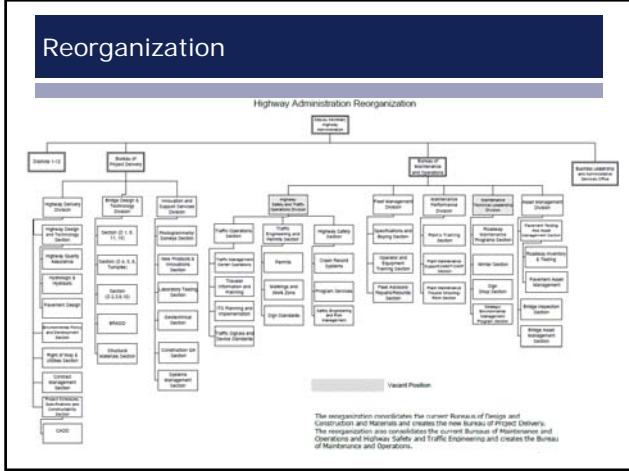
www.dot.state.pa.us

Manhole standard revisions

- Initial work performed by Gannet Fleming was funded through a previous work order established for the RC-45/46 Inlet standards.
- Funding for the manhole revisions was submitted by GF under a new work order, discussed and 'verbally' approved for finalization in November.
- Mark Burkhead unavailable to discuss status
 - E-mailed his Division Chief
 - Will follow up with Hank later this week or next.



www.dot.state.pa.us



Fourteenth Annual Pennsylvania Concrete Conference

Holiday Inn Harrisburg East

Harrisburg, Pennsylvania

January 18-19, 2012

2012 Registration Form

First Name, Middle Initial, Last Name:	Company/Bureau/District:	Phone:
First Name/Nickname for Badge:	Company Street Address:	Fax:
Job Title:	City/State/Zip:	Email:

Registration (includes breaks, lunch & Mixer) <i>Indicate affiliation →</i> <input type="checkbox"/> College or University Professor (full-time) <input type="checkbox"/> College or University Student (full-time)	\$50	
	<input type="checkbox"/> Government (Local) <input type="checkbox"/> Non-Profit Organizations	\$75
Method of Payment: <input type="checkbox"/> Check/Money Order enclosed or <input type="checkbox"/> Bill me. (Payable to ACPA Penn Chapter) and mail to: ACPA Penn Chapter , 800 N. Third St., Ste. 503, Harrisburg, PA 17102 Fax: 717-441-3507 , Phone: 717-441-3506 <input type="checkbox"/> VISA <input type="checkbox"/> MasterCard <input type="checkbox"/> Discover Card # _____ Exp. Date ____ / ____ 3-Digit Code _____ Billing Street No. & Zip Code: _____ (Signature) _____ (Date) _____ <input type="checkbox"/> I am an employee of an ACPA Pennsylvania Chapter Member firm attending the Conference for the first time; all fees reduced \$25.	<input type="checkbox"/> Government (State or Federal) <input type="checkbox"/> ACPA Penn Chapter Consultant Members	\$100
	<input type="checkbox"/> ACPA & Pennsylvania Chapter Members	\$175
	<input type="checkbox"/> Cooperating Association Member Firms (ACI, ACEC/PA, CABA, PACA/PCPC, PPA, PCPA)	\$200
	<input type="checkbox"/> All Others	\$350
<input type="checkbox"/> I am a non-ACPA Penn Chapter firm interested in applying the difference between member and non-member fees towards membership. See www.pa.pavement.com for application & more info.		

Exhibit Booth Yes, sign me up for an Exhibit Booth. (Spaces are limited, please fax the completed form today to (717) 441-3507).

\$450 (ACPA/Penn Chapter/Co-operating Org. Mbrs.)
 \$225 (Non-Profits/Penn Chapter Consultants)
 \$900 (All Others)

Yes, I will need electric hook-up. The fee includes registration for the Conference for the individual listed above.

Additional registrations (same organization) are \$75/person - Name: _____
 Name: _____

Please indicate any companies you do not want to be placed beside: _____

Sponsorship YES, we would like to be a Conference Sponsor

Platinum (*) \$1,000
 Gold (*) \$725
 Silver (*) \$450
 Bronze \$275

Conference Sponsors will receive prominent placement of your firm's name and logo at the Conference and on the web.

- ◆ Platinum Sponsors that are ACPA Pennsylvania Chapter member firms or members of any of the Cooperating Associations receive a complimentary Exhibit Booth (please complete Exhibitor information requested above).
- ◆ Gold and Silver Sponsors who are ACPA Pennsylvania Chapter companies or members of any of the Cooperating Associations receive one complimentary registration for the Conference. Please list the attendee's name at the top of this form.

To help us determine our catering needs, please check below which events you plan to attend:

Wednesday Lunch
 Wednesday Afternoon Break
 Wednesday Evening Concrete Mixer
 Thursday Morning Coffee/Danish
 Thursday Morning Break

ACPA Pennsylvania Chapter Business Meetings

I will be attending the ACPA Pennsylvania Chapter Business Meetings on January 17 (Members & Invited Guests only)

REGISTRATIONS MUST BE RECEIVED BY TUESDAY, JANUARY 10, 2012. No refunds will be given for cancellations requested after that date; substitutions are permitted. Please contact us at (717) 441-3506 or Pennsylvania@acpa.org if you have a disability, special dietary needs, or need special accommodations.

The ACPA Penn Chapter PennDOT Vendor number is 167582 and the DUNS number is 002687411. PennDOT participants should complete this form and fax to ACPA at (717) 441-3507. Please call the ACPA at (717) 441-3506 or Joseph S. Robinson, P.E., PennDOT Bureau of Project Delivery, Quality Assurance Division at (717) 787-4794 if you have any questions.

