Reference and Bibliography Database on
Research and Development with
Pultruded Fibre Reinforced Polymer Shapes and Systems

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Date: 01/11/19                      Pages: 193  Entries: 2682

This publication database is for publications on research and development towards the application of pultruded Fibre Reinforced Polymer (PFRP) shapes and systems in civil engineering works. Details of papers in a conference proceeding may be incomplete. The database does not include publications for retrofitting and repair, rebars or dowels in reinforced concrete and process engineering.

References in the 13 categories are listed in alphabetical order by first author’s surname and then year of publication.

Every effort is made to accurately record a publication’s details so that you can obtain a copy. The compiler cannot be responsible for any errors in the listings.

Information for new publications or/and revisions shall be gratefully received, and the database will be updated for the next month.

MAGAZINE, BOOKS, REVIEW AND APPLICATION ARTICLES


6. Anon., ‘Fiberglass spire high point on Atlanta skyline,’ FRP Inter., 1 1, 1993, 7.


17. Anon., 'Fibreforce expands pultruded profile range', J. British Corrosion, 32 1, 1997, 11. (news item)
27. Anon,' Schuyler Heim lift bridge to get composite demonstration deck panels by end of year,' Advanced Materials and Composites News (USA), 22 18, 2000, 5-6.
31. Anon., 'Pultrusion market needs a better strategy,' Materials World, 13 2, 7-7 Dec 2005.


67. Busel, J., 'State of the North American pultrusion industry – An examination of the the pultrusion industry, plus update on the LRFD design standard,' Composite Manufacturing, April, 2008, 28-54. (not every page)


77. Daniel R.A. Nagtegaal G., 'Pedestrian bridge of pultruded sections as result of ecological design,' in Proc. EPTA Seminar, EPTA, 2001, p ?.


88. Faber Maunsell. FRP footbridge in place. Reinforced Plastics, 47 (No. 6), 2003, 9.


102. Goldworthy W.B., ‘Composites just another building material - Only better,’ in Proc. 40th Inter. SAMPE Symposium and Exhibition, Anaheim Convention Center, SAMPE, 40, 1, 1995, 504-512.


110. Head, P.R., ‘The world’s first advanced composite road bridge,’ in Proc. Advanced Composite Materials in Bridges and Structures (ACMBS/1-MCAPC/1), Montreal, The Canadian Society for Civil Engineers, 1992. ??


113. Head, P.R., ‘High performance structural materials: Advanced composites,’ in Proc. IABSE Colloquium on Remaining Structural Capacity, Copenhagen, 1996. ??

114. Head, P.R., ‘Advanced composites in civil engineering – A critical overview at this high interest, low stage of development,’ in Proc. Fiber Composites in Infrastructure, 2nd Inter. Conf. on Composites in Infrastructure (ICCI’98), University of Turzon, AZ, Vol. 1, 3-15.


134. Kaempen, C.E., ‘Building and transportation systems that provide a new growth market for structural composites,’ in Proc. 37th Inter. SAMPE Symposium, SAMPE, 1992, ??.


139. Keller, T., ‘New bridges and buildings constructed from translucent GFRP sandwich panels and glued GFRP elements,’ in Proc. 3rd Inter. Conf. on Advanced Composite Materials in Bridges and Structures, The Canadian Society for Civil Engineers, 2000, 785-792.


152. Lass, H., ‘At last, pultrusion may be ready for the big time,’ Chemical Week, April 1989, 34-35.


207. Russo, S., 'Case study: Seismic design and construction of large pultruded FRP structure,' IIFC newsletter, FRP Inter., Vol. 8 No. 2, 2011.

208. Ryszard D.A., 'Construction material for a bridge with regard to the environment,' Bautechnik, 80 1, 2003, 32-42.


JOURNALS, NEWSLETTERS AND MAGAZINES

244. Reinforced Plastics, Elsevier Advanced Technology, monthly.

245. J. Composites for Construction, American Society of Civil Engineers, Reston, four issues per year.

246. Composite Design and Applications - The Source for Solutions and Technology. USA.


248. Loud, S., (Ed.), Composites News: Infrastructure, Composites News Inter., Solana Beach, California, USA.


250. ‘Profile’, Quarterly Newsletter from Strongwell Corporation, USA.

MATERIAL CHARACTERISATION


256. Al-Assafi, S., 'Thermomechanical analysis of water aged pultruded composites,' in Proc. 4th Asian-Australian Conf. on Composite Materials (ACCM-4), Sydney, July 2004. ??


258. Al-Assafi, S., 'Analysis of aged vinylester and polyester pultruded composites,' J. of Advanced Materials, 37 4, 2005, 70-75. ??


401. Helbling, C. and Karbhari, V.M., ‘Durability assessment of combined environmental exposure and bending, in Proc. 7th Inter. Symposium on Fiber-Reinforced (FRP) Polymer Reinforcement for Concrete Structures, SP-230-79, 2005, 1397-


442. Lackey, E, ‘Iosipescu shear testing and combined loading compression (CLC) testing of pultruded composites,’ Final Report ASTM D 5379-93 and ASTMD 6641-01, University of Mississippi, Oxford, MS, USA.


447. Li, C.G., Xian, G.J. and Li, H. ‘Water absorption and distribution in a pultruded unidirectional carbon/glass hybrid rod under hydraulic pressure and elevated temperatures,’ Polymer, 10 6, 2008, Article No. 627. doi: 10.3390/polym10060627


471. Mosallam, A.S., ‘Mechanical behavior of pultruded composites under elevated temperatures,’ in Proc. 2nd World Pultrusion Conf. in Baltimore, Brisk Events, 21-22 May, 2009, USA.


491. Park, J.Y., ‘Effect of nanofillers and void to the shear properties of pultruded composites,’’ in Proc. of Composites and Polycon 2006, ACMA, St. Lois, MO, 2006. ??


508. Quadrino, A., Penna, R., Feo, L. and Nistico, N., ‘Mechanical characterization of pultruded elements: Fiber orientation influence vs web-flange junction local problem. Experimental and


519. Russo, S., Ghadimi, B., Lawania, K., Rosano, M., ‘Residual strength testing in pultruded frp material under a variety of temperature cycles and values,’ Composite Structures, 133, 2015, 458-475. doi: http://dx.doi.org/10.1016/j.compstruct.2015.07.034


doi: 10.1016/j.matdes.2016.07.139


524. Saribiyik, M., Caglar, N. and Firat, S. 'Design of a short tensile coupon for fiber reinforced
plastic using artificial neural networks,’ Science and Engineering of Composite Materials, 12 4,


pultruded glass fibre reinforced polymer rebar by dynamic mechanical thermal analysis,’

527. Sawpan, M.A., ‘Shear properties and durability of GFRP reinforcement bar aged in seawater,’

mechanical behavior of two pultruded composites,’ Fire Technology, 54 6, 2018, 1565-1583.
doi: 10.1007/s10694-018-0754-7


530. Seangatith, S., 'Mechanical properties and behavior of glass fiber-reinforced plastic composite
material,' in Proc. 5th National Convention on Civil Engineering, Chonburi, Thailand, March 24-

531. Sebastian, W.M., ‘Fibre waviness in pultruded bridge deck profiles: Geometric characterisation
and consequences on ultimate behaviour,’ Composites Part B Engineering, 146, 2018, 270-
280. doi: 10.1016/j.compositesb.2018.03.042

532. Senne, J., Lesko, J.J. and Case, S.W., ‘A life prediction methodology for thick section
composites used in civil engineering,’ J. Reinforced Composites Technology & Research, 22 4,

reinforced polymer composite materials,’ in Proc. Inter. Conf. on Materials Strength and
Applied Mechanics (MSAM 2018), IOP Conference Series-Materials Science and Engineering,
Vol. 372, 2018, Article No. UNSP 012039. doi: 10.1088/1757-899X/372/1/012039

534. Sevcik, M., Shahverdi, M., Hutar, P. and Vassilopoulos, A.P., ‘Analytical modeling of mixed-
Mode bending behavior of asymmetric adhesively bonded pultruded GFRP joints,’ Engineering
Fracture Mechanics, 147, 2015, 228-242.

535. Shao, Y. and Kouadio, S., ‘Durability of fibreglass sheet piles in water,’ J. Composites for


563. Turvey, G.J. and Zhang, Y., 'Tearing failure of web-flange junctions in pultruded GRP profiles,' in Proc. 7th Inter. Conf. Deformation and Fracture of Composites (DFC7), 2003. ??


Chapter 5 by O. Gunes, Cankaya University, Turkey - Failure modes in structural applications of fiber-reinforced polymer (FRP) composites and their prevention
Chapter 7 by S. Moy, University of Southampton, UK - Advanced fiber-reinforced polymer (FRP) composites for civil engineering applications
Chapter 13 by N. Uddin, A.M. Abro, J.D. Purdie and U. Vaidya, The University of Alabama at Birmingham, USA - Thermoplastic composites for bridge structures
Chapter 16 by R. Liang and G. Hota, West Virginia University, USA - Fiber-reinforced polymer (FRP) composites in environmental engineering applications


**STRUCTURAL HEALTH MONITORING AND NON-DESTRUCTIVE TESTING**


ELEMENT BEHAVIOUR


742. Borowicz, D.T. and Bank L.C., ‘Behavior of deep fibre-reinforced polymer beams subjected to concentrated loads in the place of the web,’ in Proc. 6th Inter. Conf. on FRP Composites in Civil


822. Epaarachchi, J.A., ‘Change of dynamic response of pultruded composite components used in advanced composite structures due to fatigue and fracture,’ in Proc. 20th Australasian Conf. on


874. Holloway, L and Lee, J., ‘Discussion of the paper ‘Short- and long-term structural properties of pultruded beam assemblies fabricated using adhesive bonding’ Composite Structures, 28 1, 1994, 121


876. Insausti, A., 'A design method for concentrically loaded FRP columns following the Eurocode,' in Proc. 8th Inter. Conf. on Composite Materials (Advancing with Composites 2005), AMME-ASMECCANICA, Università di Napoli, 2005, pg 1-7.


881. Johnson, A.F., ‘Simplified buckling analysis for RP beams and columns,’ in Proc. 1st European Conf. on Composite Materials (ECCM/1), Bordeaux, 1985, 541-549. ??


913. Lane, A. and Mottram, J.T., 'The influence of mode interaction upon the buckling of concentrically loaded wide-flange pultruded columns,' in Proc. 3rd Inter. Conf. on Advanced Composite Materials in Bridges and Structures, The Canadian Society for Civil Engineers (CSCE), 2000, 463-470.


966. Nagaraj, V. and GangaRao, H.V.S., ‘Static and fatigue response of pultruded FRP beams without and with splice connections,’ Research Report No. CFC 94-184, to NSF and WVDOT, West Virginia Univ., Morgantown, WV, USA,


995. Park, J. Y. and Lee, J. W., ‘Determination of shear buckling load of a comparably large pultruded polymer composite I-Section by asymmetric loading,’ in Proc. 24th CANCAM, Saskatoon, Saskatchewan, Canada, 2013. ??


1043. Russo, S., A review on buckling collapse of simple and complex columns made from pultruded FRP material, 8 1, 2017, 1-34. doi: 10.1615/CompMechComputApplIntJ.v8i1.10


1054. Seangatith, S., ‘Structural behavior of concentrically loaded GFRP angle columns,’ in Proc. 7th Inter. Conf. on Composite Engineering (ICCE/7), University of Colorado, 2000, 781-782.


1060. Seangatith, S., 'Structural behaviors of concentrically loaded GFRP angle columns,' in Proc. 7th Inter. Conf. on Composite Engineering, Denver, Colorado, USA, July 2-8, 2000, 781-782.


1074. Shao, Y.X. and Shanmugam, J., 'Moment capacities and deflection limits of PFRP sheet piles,' J. Composites for Construction, 10 6, 2006, 520-528.


1083. Sirjani, M.B. and Razzaq, Z., 'Stability and LRFD approach for FRP channel beams under three-point loading,' in Proc. 7th Inter. Conf. on Composite Engineering (ICCE/7), University of Colorado, 2000, 737-738.


1090. Stubbs, D., 'Buckling tests on pultruded GRP short columns in axial compression,' Final Year Project Report, Engineering Department, Lancaster University, 1998, pp. 159.


1103. Teh, K. and Huang, C., ‘Shear deformation coefficient for generally orthotropic beams,’ Fiber Science and Technology, 1979, 12, 73-80.


1116. Turvey, G.J. and Brooks, R.J., ‘Lateral buckling tests on pultruded GRP I-sections beams with simply supported-simply and clamped-simply supported end conditions,’ in Proc. 1st Int. Conf. on Composites in Infrastructure (ICCI'96), University of Arizona, Tucson, 1996. 651-664.


1152. Wong, P.M.H., Wang, Y.C. and Davies, J.M., ‘Behaviour of fibre reinforced plastic (GRP) columns at elevated temperatures,’ CIB-CTBUH Inter. Conf. on Tall Building, Malaysia, 2003. ??

1153. Wong, P.M.H., 'Performance of GRP composite structures at ambient and elevated temperatures,' The Structural Engineer, 81 15, 2003, 10 & 12.

1155. Wong, P.M.H. and Wang, Y.C., An experimental study of pultruded glass fibre reinforced plastics channel columns at elevated temperatures,' Composite Structures, 81 1, 2007, 84-95.


Yuan, R.L. and Hashen, Z., ‘The effect of end support conditions on the behavior of GFRP composite columns,’ in Proc. 1st Inter. Conf. on Composites in Infrastructure (ICCI’96), University of Arizona, 1996, 621-627.


Yuan, R.L. and Seangatith, S., 'Vibration analysis of simply supported pultruded GFRP composite beams under dynamic loads,' in Proc. 3rd Inter. Conf. on Composite Engineering, New Orleans, Louisiana, USA, 1996.

Yuan, R.L. and Seangatith, S., ‘Vibration analysis of GFRP composite box beam,’ in Proc. 1st Inter. Conf. on Composites in Infrastructure (ICCI’96), University of Arizona, 1996, 965-966.


CONNECTIONS AND JOINTS


doi: 10.1080/09243046.2013.871174


1307. Keller, T., De Castro, J. and Zhou, A., System ductility and redundancy of FRP structures with flexible adhesive joints,’ Proc. 4th Inter. Conf. of Advanced Composite Materials in Bridges and


1339. Matharu, N.S. and Mottram, J.T., ‘Laterally unrestrained bolt bearing strength: Plain pin and threaded values,’ in Proc. 6th Inter. Conf. on FRP Composites in Civil Engineering (CICE 2012), Rome, Section 14: Codes and Design Guidelines, Paper 311, 2012, pp. 8 (CD-Rom)


1342. Mcgrath G.C., ‘Aspects of joining pultrusions,’ http://www.pultron.co.nz/technical.htm (and via technical papers) 21/12/05


1390. Mottram, J.T., ‘Determination of pin-bearing strength for the design of bolted connections with standard pultruded profiles,’ in Proc. 4th Inter. Conf. on Advanced Composites in Construction (ACIC 2009), NetComposites Ltd, Chesterfield, 2009, 483-495.


1411. Peirick L. and Dawood, M., ‘Behavior of bolted and bonded simple shear connections for structural GFRP sandwich panels,’ in Proc. 6th Inter. Conf. on FRP Composites in Civil Engineering (CICE 2012), Rome, Section 8: All-FRP and Smart FRP Structures, Paper 357, 2012, pp. 9.


1435. Rietz, A., ‘Failure of bolt connection in fiber reinforced plastic component exposed to bending torque,’ Engineering Failure Analysis, 84, 2018, 109-120.


1484. Turvey, G.J. and Cooper, C., ‘Characterization of the short term static moment-rotation responses of bolted connections between pultruded GRP beams and column WF-sections,’ in Proc. 2nd Inter. Conf. on Advanced Composite Materials in Bridges and Structures, Montreal (ACMBS/2), The Canadian Society for Civil Engineers (CSCE), Montreal, 1996, 927-934.


1559. Zafari, B., Qureshi, J. Mottram, J. T. and Rusev, R. 'Static and fatigue performance of resin injected bolts for a slip and fatigue resistant connection in FRP bridge engineering,' Structures, 7, 2016, 71-84. doi: 10.1016/j.istruc.2016.05.004

1560. Zafari, B., Qureshi, J. Mottram, J. T. and Rusev, R. 'Static and fatigue performance of resin injected bolts for a slip and fatigue resistant connection in FRP bridge engineering,' Structures, 7, 2016, 71-84. doi: 10.1016/j.istruc.2016.05.004


**STRUCTURES AND BRIDGES**


1695. Evernden M.C. and Mottram J.T., 'Closed-form equations for flange force and maximum deflection of box-beams of fiber reinforced polymer with partial shear interaction between webs and flanges,' Advances in Structural Engineering, 14 6, 2011, 991-1004.


Bridges and Structures (ACMBS-2), The Canadian Society for Civil Engineers (CSCE), 1996, 975-982.


1769. Keller, T., and Schollmayer, M., 'In-plane tensile performance of a cellular FRP bridge deck acting as top chord of continuous bridge girders,' Composite Structures, 72 1, 2006, 130-140.

1770. Keller, T., and Gurtler, H., 'In-plane compression and shear performance of FRP bridge decks acting as top chord of bridge girders,' Composite Structures, 72 2, 2006, 151-162.


1877. Morgado, T., Silvestre, N. and Correia, J.R., ‘Simulation of fire resistance behaviour of 
pultruded GFRP beams - Part I: Models description and kinematic issues,’ Composites 

1878. Morgado, T., Silvestre, N. and Correia, J.R., ‘Simulation of fire resistance behaviour of 
pultruded GFRP beams - Part II: Stress analysis and failure criteria,’ Composites Structures, 

resistance of GFRP pultruded tubular beams,’ Composites Part B: Engineering, 39, 15, 2018, 
106-116. doi.org/10.1016/j.compositesb.2017.11.036

1880. Mosallam, A.S. and Bank, L.C., ‘Creep and recovery of a pultruded FRP frame,’ in Proc. ASCE 
301.

1881. Mosallam, A.S. and Bank, L.C., ‘Short term behavior of a pultruded fiber reinforced plastic 

Conf. on Research Transformed into Practice, Implementation of NSF Research, National 
Science Foundation, Chapt. 61, 1995, 94-107.

1883. Mosallam, A.S., ‘Seismic performance of pultruded frame structures,’ in Proc. Composites’ 95, 
The Winning Edge, Composite Fabricators Association (CFA), 1995.

composite structural beams in the Tom’s Creek bridge,’ Research report to NSF and 
Technology Center for High Performance Polymeric Adhesives and Composites, Virginia Tech., 
USA, Summer 1996.

decks,’ in Proc. 3rd Inter. Conf. on Composites in Infrastructure (ICCI’02), Omipress (CD-ROM), 

1886. Mottram, J.T., ‘Recommendations for the optimum design of pultruded frameworks,’ 

1887. Mottram, J.T. and Zheng, Y., ‘Analysis of a pultruded frame with various connection 
properties,’ in Proc. 2nd Inter. Conf. on Composites in Infrastructure (ICCI’98) Fiber Composites 

1888. Mottram J.T. and Aberle, M., ‘When should shear-flexible stability functions be used in elastic 

1889. Mottram, JT., Prangley, D. and Knudsen, E.S., ‘Behaviour of pultruded FRP beam-to-beam 
subassemblies connected by bolted web cleats,’ in Proc. 1st Inter. Conf. on Innovative 
Materials and Technologies for Construction and Restoration (IMTCSR04), Liguori Editore, 


1935. Russo, S., Boscato, G. and Mottram, J.T., ‘Design and free vibration of a large temporary roof FRP structure for the Santa Maria Paganica church in L’Aquila,’ in Proc. 6th Inter. Conf. on FRP Composites in Civil Engineering (CICE 2012), Rome, Section 8: All-FRP and Smart FRP Structures, Paper 209, 2012, pp. 8 (CD-Rom)


doi: 10.1016/j.compositesb.2012.07.050


1995. Stankiewicz, B., Mossety-Leszczak, B., Byczynski, L. and Kisiel, M., ‘Synergistic effect on the degradation rate of pultruded glass fiber-reinforced polymer bridge panel after 20 years of


2010. Tayeb, Baverel, Caron, and Du Pelouxin, ‘Gridshells in composite materials: construction of a 500 m² forum for the solidays' festival in Paris,’ in Proc. 6th Inter. Conf. on FRP Composites in Civil Engineering (CICE 2012), Rome, Section 11: Durability and Long-Term Performance, Paper 179, 2012, pp. 8. (no authors’ initials)


2068. Zhan, Y., Wu, G., Yang, M. and Yang, L.S., ‘Experimental study on fast repair of equal-angle steel lattice column with GFRP pultruded profiles,’ in Proc. 7th Inter. Conf. on Advances in Steel Structures, Nanjing, China, Apr 14-16, 2012.


2081. Zheng, Y. and Motttram, J.T., ‘Analysis of pultruded frames with semi-rigid connections,’ in Proc. 2nd Inter. Conf. on Advanced Composite Materials in Bridges and Structures (ACMBS/2), The Canadian Society for Civil Engineers (CSCE), 1996, 919-927.


OTHER TECHNICAL ASPECTS (INCLUDING DURABILITY AND FIRE PERFORMANCE)


2187. Russo, S., ‘Shear and local effects in all-FRP bolted built-up columns,’ Advances in Structural Engineering, 18 8, 2015, 1227-1240.


2197. Turvey, G.J. and Slater, R.C., ‘Tests on pultruded GRP posts for handrail/barrier structures,’ in Proc. 1st Advanced Composite Materials in Bridges and Structures (ACMB/1), Canada Society for Civil Engineers (CSCE), 1992, 319-329.


DESIGN MANUALS AND ASSOCIATED MATERIAL


2237. CTI. 'CTI fastener material guidelines - FMG-144 (94),' Cooling Technology Institute, Houston, July 1994.


2239. CTI 'Structural Design of FRP Components - STD-152 (02),' Cooling Technology Institute, Houston, July 2002.


2242. Dutta, P.K., ‘Fatigue of composite bridge decks under extreme temperatures,’ in Proc. 7th Inter. Conf. on Composite Engineering (ICCE/7), University of Colorado, 2000, 755-756.


2246. Evans, D.J., ‘Classifying pultruded products by glass loading,’ in Proc. 41st Annual Conf. SPI, Composite Institute, SPI, 1968, Session 06-E.


2263. Lesko, J.J. and Cousins, T.E., ‘EXTREN DWB® design guide - 8”x6” EXTREN DWB® hybrid and all-glass materials configuration and 36”x18” EXTREN DWB® hybrid material configuration,’ Strongwell Cop., 2003.


2275. Nishizaki, I., Kishima, T., and Sasaki, I., ‘Consideration on safety factors of pultruded FRP as bridge structural materials, in Proc. 54\textsuperscript{th} Annual Conf. of Japan Society of Civil Engineers (A), September 1999, 20-21.


2285. Tromp, L., and van Ijelmuijden, K., ‘Improving the Dutch FRP recommendation for load bearing structures,’ in Proc. 5\textsuperscript{th} Inter. Conf. on Advanced Composites in Construction (ACIC 2011), NetComposites Ltd., Chesterfield, UK, 2011, 364-374.


DESIGN GUIDANCE, STANDARDS AND PATENTS


2297. Anonymous. ‘Pre-Standard for Load and Resistance Factor Design (LRFD) of Pultruded Fiber Reinforced Polymer (FRP) structures (Final),’ submitted to American Composites Manufacturer Association (ACMA)), American Society of Civil Engineers, 9 November 2010, p. 189. (not in public domain)


2302. ‘Structural design of FRP components,’ CTI Bulletin ESG-152 (13), Cooling Technology Institute, May 2013, p. 15.


2331. ‘Standard test method for density and specific gravity (relative density) of plastics by displacement,’ D792-08, ASTM, West Conshohocken, Pa, 2008.


2342. ‘Standard guide for design, fabrication, and erection of fiberglass reinforced chimney liners with coal-fired units,’ D5364-08e1, ASTM, West Conshohocken, Pa, 2008.


2345. ‘Standard test method for determining the compressive properties of polymer matrix composite laminates using a combined loading compression (CLC) test fixture,’ D6641 / D6641M-09, ASTM, West Conshohocken, Pa, 2009


CONFERENCES


2374. Neale, K.W. and Labossiere, P. (Eds.), 1st Advanced Composite Materials in Bridges and Structures (ACMBS/1), Canada Society of Civil Engineers (CSCE), 1992.


2408. Ye, L., Feng, P. and Yue, Q. (Eds.), Proc. 5th Inter Conf on FRP Composites in Civil Engineering (CICE 2010), 27-29 September 2010, Biejing, China, Vol. 1., FRP for Future Structures, Advances in FRP Composites in Civil Engineering, Tsinghus University Press, 2010.


2412. Whysall, C., and Taylor S. (Eds.), Advanced Composites in Construction 2013 (ACIC 2013), Proc. 6th Inter. Conf. on Advanced Composites in Construction 2013, Queen’s University of Belfast. 10-12 September 2013, NetComposites Ltd., Chesterfield, UK, pp. 409.


**THESSES**


2447. Coleman, J. T., 'Continuation of field and laboratory tests of a proposed bridge deck panel fabricated from pultruded fiber-reinforced polymer components,' MS Thesis, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, 2002. 


2489. Jackson, ‘Compression creep of a pultruded E-glass/polyester composite columns at elevated service temperatures,’ MSc thesis, School of Civil Engineering, Georgia Institute of Technology, 2005.


2515. Liu, X., 'A linear and nonlinear numerical investigation on static behavior of pultruded composite (PERP) portal frame structures,' MS thesis, California State University, Fullerton, USA, 2000. 149 pages


2524. McMahon, A.R., ‘Design, construction and testing of a glass reinforced plastic bonded truss frame,’ Final Year Project Report, School of Science and Technology, Division of Civil Engrg. and Building, University of Teesside, UK, 1996.


http://repository.tamu.edu/handle/1969.1/ETD-TAMU-3008?show=full

https://smartech.gatech.edu/handle/1853/5142


http://smartech.gatech.edu/jspui/bitstream/1853/26699/1/na_gwang-seok_200812_phd.pdf


Park, J.Y., ‘Pultruded composite materials under shear loading,’ PhD Dissertation, Georgia Technology University, USA, 2001. 299 pages


Prachaseree, W., ‘Performance evaluation of FRP bridge deck under shear loads,’ PhD Disseration, College of Engineering and Mineral Resources, West Virginia University, Morgantown, WV, USA, 2005.


Qureshi, M.A.M. ‘Failure behavior of pultruded GFRP members under combined bending and torsion,’ Dissertation submitted to the Benjamin M. Statler College of Engineering and Mineral Resources at West Virginia University, Morgantown, WV, 2012.


2580. Spencer, S. 'Mechanical fastened connection for pultruded composite profiles,' MRes in Advanced Engineering, School of Engineering, Univ. of Warwick, UK, Sept 98.


WEB SITES
2612. Access Design and Engineering http://www.access-design.co.uk/
2613. Ahlstrom Coporation (Glassfibre) www.ahlstrom.com/
2614. American Composites Manufacturers Association (ACMA) www.cfa-hq.org
2615. Anglia Composites Ltd. www.angliacomposites.co.uk
2617. Bakaert Composites http://www.bekaert.com/
2618. The British Plastics Federation http://www.bpf.co.uk/
2619. Captrad, UK http://www.captrad.com/
2620. CTS Bridges, Huddersfield, UK http://www.ctsbridges.co.uk/ https://www.youtube.com/watch?v=CSn8_wNZLcg
2621. Comfort line (door and windows) http://www.comfortlineinc.com/
2622. Composite Construction Laboratory (CCLAB) http://www.cclab.ch/
2623. Composite Cooling Solutions http://compositecooling.com/ (Cooling towers)
2625. Composites UK (trade organization) https://compositesuk.co.uk/ Construction Sector Group
2626. Composites z http://www.compositez.com/
2628. Cooling Technology Institute, Houston http://www.cti.org/
2629. CoSACNet (UK academic Network for Advanced Polymeric Composites for Structural Applications in Construction) http://www.cosacnet.soton.ac.uk/
2631. Deck Industry Association http://www.deckindustry.org/resources.htm
2635. Dura Composites http://www.duracomposites.com/ high quality flooring and cladding
2636. EPI, fabricator (Texas, USA) http://engpro.com/
2638. EPTA (European Pultrusion Technology Association) http://pultruders.org/
2639. Exel Composites (UK) http://www.fibreglass-engineering-solutions.co.uk/index.htm (was Fibreforce Composites Ltd.)
2640. Firegard Safety Services Ltd, UK. http://www.firegard.co.uk/
2641. Fibergrate Composite Structures (Fiberglass Gratings and Structural Systems), (USA) http://www.fibergrate.com/
2642. Fibergrate (Fiberglass Gratings and Fiberglass reinforced plastic products), (UK) http://www.fibergrate.co.uk/
2643. Fiberline Composites A/S (Denmark) http://www.fiberline.com/
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<th>No.</th>
<th>Organization (Country)</th>
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<td>[<a href="http://www.genesiscomposites.co.uk/">http://www.genesiscomposites.co.uk/</a>]</td>
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<td>Glasforms Inc.</td>
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<td>2648</td>
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<td>2649</td>
<td>IFE Pultrusion Exchange</td>
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<tr>
<td>2650</td>
<td>IIFC (Inter. Institute for FRP in Construction)</td>
<td>[<a href="http://www.iifc-hq.org/">http://www.iifc-hq.org/</a>]</td>
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<td>2651</td>
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<td>2652</td>
<td>James Quinn Associates Ltd.</td>
<td>[<a href="http://www.jqal.co.uk/">http://www.jqal.co.uk/</a>]</td>
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<td>2653</td>
<td>Kemrock Industries &amp; Exports Ltd.</td>
<td>[<a href="http://www.kemrock.com/">http://www.kemrock.com/</a>] (India)</td>
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<td>2654</td>
<td>KaZaK Composites, Inc.</td>
<td>[<a href="http://kazakcomposites.com/">http://kazakcomposites.com/</a>]</td>
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<td>2655</td>
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<td>2656</td>
<td>Liberty Pultrusions (West Mifflin, Pa.)</td>
<td>[<a href="http://www.libertypultrusions.com/">http://www.libertypultrusions.com/</a>]</td>
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<td>2657</td>
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<td>[<a href="http://www.lk-uk.com/">http://www.lk-uk.com/</a>]</td>
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<td>2658</td>
<td>Martin Pultrusion Group</td>
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<td>2659</td>
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<td>[<a href="http://www.netcomposites.com">http://www.netcomposites.com</a>]</td>
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<td>Pipex px, fabricator (UK)</td>
<td>[<a href="https://www.pipexpx.com/">https://www.pipexpx.com/</a>]</td>
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<td>Polymec, Madrid, Spain</td>
<td>[<a href="http://polymec.com/">http://polymec.com/</a>]</td>
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<td>[<a href="http://www.powertrusion.com">http://www.powertrusion.com</a>]</td>
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<td>[<a href="http://www.pultrall.com/Site2008/index.htm">http://www.pultrall.com/Site2008/index.htm</a>]</td>
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<td>[<a href="http://www.pultrusionindustry.org/">http://www.pultrusionindustry.org/</a>]</td>
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<td>[<a href="http://www.psicoolingtowers.com/">http://www.psicoolingtowers.com/</a>] FRP cooling towers</td>
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2671. Röchling (Germany) [http://www.roechling-haren.de/]

2672. Schneider Electric. (Industrial cable containment systems) [https://www.schneider-electric.co.uk/en/product-category/80049-cable-management-systems]

2673. Seasafe (pultruder) [http://www.seasafe.com/]

2674. Strongwell [http://www.strongwell.com]

2675. SXP Cooling technologies [http://spxcooling.com/]


2677. Tufnol (UK) [http://www.tufnol.com/]

2678. Universal Pultrusions (door systems for corrosive industrial applications) (Arizona, USA) [https://special-lite.com/fiberglass-doors/af-100-af-pultruded-smooth-door/]


2680. West Virginia University – Constructed Facilities Center [http://www.cemr.wvu.edu/cfc/]

2681. Yprado [http://www.yprado.eu/] windows and doors

2682. ZellComp, Inc. prefabricated High-Load Structural Decking System [http://www.zellcomp.com/]

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