

MARCOS JAVIER MARTÍNEZ ANDINO

Structural Engineer

Current Address:

134 Heritage Riverwood Dr., Apt. P

Central, SC 29630

USA

Email: marcosjma10@gmail.com

marcosm@clemson.edu

Phone: 864-735-4616

EDUCATION

Clemson University, Clemson, SC, USA

Ph.D. Candidate in Civil Engineering (emphasis in Structural Engineering), May 2018 (expected)

Central American Technological University (UNITEC), Tegucigalpa, Honduras

Master's in Structural Engineering, September 2011

Summa Cum Laude

National Autonomous University of Honduras (UNAH), Tegucigalpa, Honduras

Bachelor's in Civil Engineering, April 2009

PROFESSIONAL EXPERIENCE

Consultant in Structural Mechanics in private firm of Joaquín Torre (2011-2015)

- Redesign of Powerhouse (mat foundation), H.P. Nispero 2 (6 MW), Santa Bárbara, 2015.
- Review of structural design of Interchange “Valle de Ángeles” Box-Girder bridge, Tegucigalpa, 2014.
- Structural design of CEUTEC “El Prado” that includes classroom building, mall, parking structure, Tegucigalpa, 2014.
- Structural design of house “Villas Tribeca” with RC bearing walls with 10cm thickness, San Pedro Sula, 2014.
- Structural design of House “Villas Tribeca” with masonry block walls, San Pedro Sula, 2014.
- Review of structural shelves at Main Warehouse of Astaldi S.p.A., Tegucigalpa, 2014.
- Retrofit in the foundation of EPR telecommunications tower, Copán, 2014.
- Structural design of Ecovivienda II project, RC bearing walls with 10cm thickness, 10-story building, Tegucigalpa, 2014.
- Structural design of RC retaining wall at Plaza La Primavera, Tegucigalpa, 2014.
- Structural design of WalMart El Sauce, Tegucigalpa, 2014.
- Design of Powerhouse, H.P. Puringla and Sazagua (10 MW), La Paz, 2014.

- Design of steel structure for supporting formwork for the construction of Interchange “Valle de Ángeles,” Tegucigalpa, 2014.
- Design of Powerhouse, H.P. Níspero 2 (6 MW), Santa Bárbara, 2014.
- Review of structural design of pedestrian bridge of 16m, El Edén beach, Cedeño, Choluteca, 2013.
- Structural design of “Torre Onix building,” 15 stories with post-tensioned slab, Residential La Hacienda, Tegucigalpa, 2013.
- Structural design of expansion of “Emisoras Unidas Bridge” for the public transportation program in the Central District, 2013.
- Structural design of expansion of “Bridge between La Colonia Supermarket and Hospital Escuela” for the public transportation program in the Central District, 2013.
- Structural design of expansion in “Irrigation Varsovia Channel” with a 60cm thick solid slab of 10m in the 165+030 station, highway CA-5, 2013.
- Structural design of “bridge over Varsovia River” with I-steel girder of 48 and 30m of span, in the 148+901 station, highway CA-5, 2013.
- Structural design of “bridge over Tepemechín 2 River” with I-steel girder of 51m of span, in the 145+406 station, highway CA-5, 2013.
- Structural design of “bridge over Tepemechín 1 River” with I-steel girder of 51m of span, in the 141+712 station, highway CA-5, 2013.
- Structural design of “bridge over Tamalito River” with I-steel girder of 42m of span, in the 141+286 station, highway CA-5, 2013.
- Structural design of expansion in “Calán Bridge” with post-tensioned girder of 24m in the 114+264 station, highway CA-5, 2013.
- Structural design of “The Project for Establishment of the South Regional Hospital in Choluteca,” divided into 8 modules, Choluteca, 2013.
- Structural design of “Cemesa Hospital building,” 12 stories with reinforced concrete, San Pedro Sula, 2013.
- Creation of the mathematical model for the structural design of “Cemesa Hospital building,” 12 stories with post-tensioned slab, San Pedro Sula, 2013.
- Structural design of “Torre Luna building,” 15 stories with post-tensioned slab, Residential Tepeyac, Tegucigalpa, 2013.
- Structural design of “Bridge Río Chiquito,” 32m span, as a development of ramp #3, in the Interchange Valle de Ángeles.
- Structural design of “Medina Guillén Residential building,” 3 stories with post-tensioned slab, San Pedro Sula, 2013.
- Structural re-design of post-tensioned slabs in “Green Tower building,” Residential La Hacienda, Tegucigalpa, 2013.
- Structural design of “Anexo Torre Lara building,” 15 stories with post-tensioned slab, Residential Lara, Tegucigalpa, 2012.

- Pre-structural design of expansion bridges over the runner Public Transportation System, Tegucigalpa, 2012.
- Structural design of retaining walls in housepower of “Morja Hydroelectrical Project,” Copán, 2012.
- Structural re-design of post-tensioned slabs in “El Sauce Apartments,” Tegucigalpa, 2012.
- Structural design of “The View building,” 14 stories with post-tensioned slab, Tegucigalpa, 2012.
- Structural design of “F31 building,” 8 stories with post-tensioned slab, Costa Rica, 2012.
- Structural revision in the existing parking building and structural design of the expansion in the “Banco de Occidente,” San Pedro Sula, 2012.
- Structural design of “Banco de Occidente parking building,” 4 stories with post-tensioned slab, San Pedro Sula, 2012.
- Structural design of “Access ramp in Banco de Occidente,” San Pedro Sula, 2012.
- Structural design of VIP, A, B, C apartments, Auditorium, lobby, treatment plant, spillway, box-bridge in Touristic Center COLPROSUMAH, Tela, Atlántida, 2012.
- Preliminary Structural design of “City Mall building,” Alajuela, Costa Rica, 2011.
- Preliminary Structural design of “Unimall building,” Choluteca, 2011.

GeoConsult S.A.

Assistant Engineer/Resident Engineer (2009-2011)

- Structural design of “Torre de Control aeródromo,” Puerto Lempira, 2011.
- Design and construction of a retaining wall via soil nailing in “Metropolis building,” Tegucigalpa, 2011.
- Construction of protection slope via shotcrete, La Unión, Santa Bárbara, 2011.
- Structural design for rising tower in Torbellino, Tsunami, and Wild River Slide for Great Parks, Santander, Colombia, 2011.
- Construction of stability in the retaining wall via soil nailing of Universidad Tecnológica de Honduras, Tegucigalpa, 2011.
- Retrofit of a residential house via micro-piles in Residential San Ignacio, Tegucigalpa, 2010.
- Retrofit of soil nailing facing in Residencial Danery Alvarado, Residencial La Cumbre, Tegucigalpa, 2010.
- Construction of horizontal drainage in Universidad Tecnológica de Honduras, Tegucigalpa, 2010.
- Construction of retaining wall via soil nailing in Torre Lara building, Tegucigalpa, 2010.
- Conceptual structural revision for factibility study of Despensa Familiar in Los Dolores, Tegucigalpa, 2010.
- Creation of drawings and feasibility studies for Despensa Familiar, 2010.
- Structural analysis of a spillway in El Dorado, Nicaragua, 2010.
- Processing topographic points, creation of topographic drawings and maps, 2009.

PUBLICATIONS

- Martínez, M., Atamturktur, S., Ross, B., and Thompson, J. (submitted, in review), “Assessing the Compressive Behavior of Dry-Stacked Masonry with Experimentally Informed Numerical Models,” ASCE Journal of Structural Engineering.
- Martínez, M., Atamturktur, S., (submitted, in review), “Experimental and Numerical Evaluation of Reinforced Dry-Stacked Concrete Masonry Walls,” ASCE Journal of Structural Engineering.
- Martínez, M., Atamturktur, S., Sanders, J. (To be submitted), “Structural and Thermal Behavior to Appraise and Optimize Concrete Masonry Units via Experimental Testing and Numerical Modeling,” Energy and Buildings.
- Martínez, M., Atamturktur, S., (To be submitted), “Concrete Masonry Construction Evaluation: A Review of Experimental Tests and Numerical Models,” Construction and Building Materials.

CONFERENCE PRESENTATIONS

“Experimentally Informed Numerical Models to Assess the Behavior of Dry-Stacked Masonry,” Annual Meeting, The Masonry Society, Raleigh, NC, October 2016.

HONORS AND AWARDS

- The Kimley-Horn and Associates Graduate Fellowship 2017, Department of Civil Engineering, Clemson University.
- Paul and Helen Lenchuk Engineering Student Scholarship Program 2016 from Nacional Concrete Masonry Association.
- The James L. Noland Student Fellowship 2015 from The Masonry Society.
- The Russell Brown Fellowship 2015, Department of Civil Engineering, Clemson University.
- Valedictorian – gold medal for academic excellence, UNITEC, 2011.

TEACHING EXPERIENCE

Central American Technological University (UNITEC), teaching in the Structural Engineering Master's degree program, Tegucigalpa and San Pedro Sula campuses, 2012.

Francisco Morazán National Pedagogical University (UPNFM), teaching in the Technological Education Master's degree program, Tegucigalpa, 2012.

PROFESSIONAL AFFILIATIONS

Association of Civil Engineers of Honduras (CICH)
 Student Member American Concrete Institute (ACI)
 Student Member American Society of Civil Engineers (ASCE)

PROFESSIONAL SEMINARS AND CERTIFICATIONS

English for Academic, ELS, Greenville, SC, USA, 2014.
Diploma Online of analysis and design of conventional, segmental and arch bridges, Virtual Civil Engineering Community, 2014.
Specialization in earthquake structural engineering using SAP 200, ETABS and SAFE.
Diploma Web of Structures 2014, CSI Latin America, 2014.
Basic course of Solidworks, INESA Adiestramiento, 2014.
Non-Linear analysis and structural performance, INESA Adiestramiento, 2013.
Design of prequalified moment connections in steel structures, INESA Adiestramiento, 2013.
CSI Bridge, CSI Computers and Structures, 2012.
XI Structural Congress 2011, San José, Costa Rica.
CSI SAFE, ETABS, SAP 2000, CSI Computers and Structures, 2010.
Design of web pages (HTML, Dreamweaver, Scrips), UNITEC, 2009.
Adult English Course at American School of Tegucigalpa, 2009.
AutoCad 2D y 3D, Land Desktop, Civil 3D, Certificado Autodesk, Kátodos, 2006.

SOFTWARE

AutoCAD 2D, AutoCAD 3D, Civil 3D, Revit Structure, Staad.Pro, CSI Col, CSI ETABS, CSI Bridge, CSI SAP2000, CSI SAFE, Midas Civil, Midas Gen, Midas FEA, Midas GTS, Adapt Builder, Microsoft Office, Mathcad, Matlab, Visual Basic for Applications, ANSYS, ABAQUS, Concise Beam, AllPile, Rockscience Slide.