MANGLAR DESIGN COLLECTIVE

COSTA RICA, JULY 2021









Introduction Services and Sectors Geographical coverage







Project description Project size







Key members

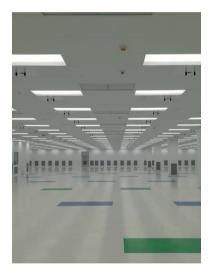






Methodology







Why us?



A joint venture of specialized consulting firms that offer integral solutions for various project challenges and customer needs.

MANGLAR is a collective of specialized design firms with outstanding experience in the fields of project management, design and customer service.

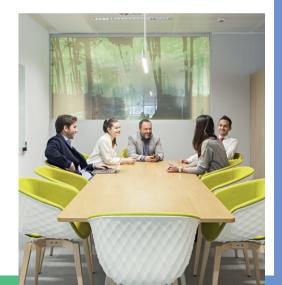
It is formed by the joint venture of 3G Office Costa Rica, AEG, Apame, Estruconsult and Bosque to create a multidisciplinary, structured, and professional team that blends the vast experience of each company to create bespoke solutions for our customer's needs.





We help our customers to achieve the highest levels of quality within the budget and time frame of the project.

The integral approach of each project provides an outstanding solution to each customer goals.



Services

CONSULTING ARCHITECTURE **ELECTRICAL ENGINEERING** STRUCTURAL ENGINEERING MECHANICAL ENGINEERING **CIVIL ENGINEERING** NOISE CONTROL LIGHT SIMULATION RENDERING **3D MODELING BIM PROJECTS** COMMISSIONING **TEST AND BALANCE** BRANDING **SIGNAGE & WAYFINDING PROJECT MANAGEMENT** LEED/WELL/EDGE CERTIFICATIONS

Sectors INDUSTRIAL COMMERCIAL RETAIL HOSPITALITY CORPORATE

EDUCATIONAL

20 Years of experience 25 Countries around the world

3000 Projects

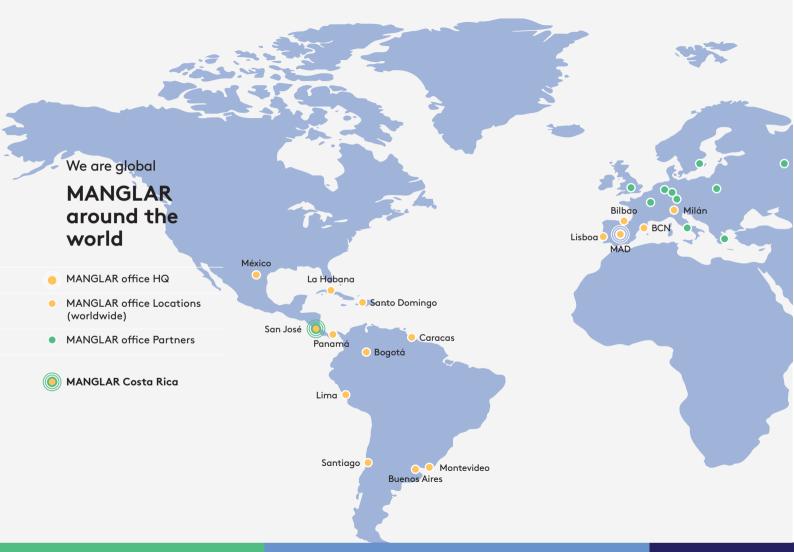
Mission

Establish an architectural and engineering key partner which provides innovation and tailor made solutions to our customer challenges.

Vision

Build long term relationships with customers. Provide interdisciplinary and innovative solutions for their daily basis and future projects.





WHERE WE GIVE REGIONAL Support in Latam

Argentina	Buenos Aires	MANGLAR Office Argentina
Brazil	Sao Paulo	Perkins + Will
Chile	Santiago de Chile	MANGLAR Office Chile
Colombia	Bogotá/Medellín	MANGLAR Office Colombia
Costa Rica	San José	MANGLAR Costa Rica
Centroamérica	Supported out of Costa Rica	MANGLAR Office Costa Rica
Panamá	Ciudad de Panamá	MANGLAR Office Panamá - Apame Panamá
Perú	Lima	MANGLAR Office Perú
República Dominicana	Santo Domingo + Caribe	MANGLAR Office RD
México	Quintana Roo	Apame MX

POINT OF CONTACT

Our firm	MANGLAR DESIGN COLLECTIVE
Address	San José, Santa Ana. Centro SATC, edificio A, nivel 2
Webside	www.manglardc.com
Phones	+ 506 8322-2221
Person of contact	José Eduardo Arce

CLIENTS REFERENCES

Project Contact		Telephone	Email		
Microvention	Ing. Felipe González Fasilities Director	+506 8666-8144	ana.ramirez@wework.com		
Bayer	Sebastián González Anglada Head of Facilities Management CA&C	+506 6059-3280 +506 4100-6340	sebastian.gonzalez@bayer.com		
Coopervision	Miguel Porras Facilities Director	+506 8932 5834	mporras@coopervision.com		
Dos Pinos	Oscar Emilio Marin Camacho Alejandro Jose Mora Madrigal Project Engineers	+506 8881 6323 +506 8340 4085	osmarin@dospinos.com amoram@dospinos.com		
Cargill	David Rodríguez Project Manager	+506 8838 3465	davidtecmante@gmail.com		

ESTRUCTURA ORGANIZACIONAL



Ing. Juan Pablo Duque

Ing. José Eduardo Arce

Fabiano Vincenzi

MANGLAR Office

Specialities:

PLANNING AND DESIGN

Work place innovation an Strategic Consulting.

Change management and implementation.

Corporative an Commercial Interiors Design.

STRATEGIC CONSULTING

LEED certification for new Building

/commercial interiors/existing building.

Consulting for EDGE certification processes.

Consulting for RESET certification processes.

Consulting for WELL Ccrtification processes.

BIM CONSULTANT

Building modeling Documentation of BIM models Construction BIM manager.



AEG Engineering Consulting S.A.

Specialities:

MEP

General Plumbing (DW/DHW/DWV).

Compressed Air (ISO Class 0)

Medical/Process Gases

(Nitrogen, oxigen, breathing air, aragon, etc)

Vacuum

Fire Protection Systems

Sprinkler per NFPA 13 and FM 2.2

Stand Pipe and Infraestructure

Deluge Systems

Pre-action systems

Clean agent system

HVAC

General office and commercial building (CAV/VAV)

Cleanrooms class 6-8

Process exhaust

Chilled beams

DX and VRV Systems

Chilled water primari only system,

Feasibilities studies

Ice storage devices

Liquid dessicant

Condensate water for RH control

Re-Use of waste heat for industrial process.

Other Services CFD Noise control



Apame & Grupo ABC





Specialities

PLANNING AND ELECTRIC DESIGN

Medium voltage electrical systems

Low voltage electrical systems for residential

Commercial and industrial Facilities.

Telecommunication systems

Lighting analysis

Grounding systems and protection against atmospheric discharges

Emergency and backup systems

Survey of electrical systems

Professional on-site inspection.

Short circuit and Time Current Curve (TCC) Analysis

Arc Flash simulation.

CONSULTING IN ENERGY SAVING AREA

Energy Saving

Real time Energy management systems

Armonic and in rush analysis iIOT Industrial Internet of things

Estruconsult S.A.

Structural Services

We are pioneers in the design and construction of SPSW (Steel Plate Shear Wall Structures) systems

Specialists in the analysis, design and detailing of steel, which implies an integral optimization of the earthquake-resistant metal systems.

We seek to optimize the structure density for all structures, seeking the complete detailing of all connections by creating 3D models for complete visualization,

We guarantee the lowest price of structures with metal prefabricated structures and/or locally assembled options.

We are pioneers in the design and construction of SPSW (Steel Plate Shear Wall Structures) systems in the country and export designs of metal structures for the entire Central American region. All our professionals participate Customized design for floor slabs for high traffic. Design of rigid and flexible pavements, with conventional or fiber reinforcement.

Studies of soil structure interaction for the analysis and design of works on soft soils using specialized software.

We perform complex soil models to reduce the foundations of structures in limited terrain support capacities.

We use specialized software to optimize earth movements and base and sub-base thickness reductions with the use of geo-synthetic materials.

Experience in the design of hydraulic civil works. Our company has worked in the design and inspection of hydroelectric projects in everything related to hydraulic civil works ranging from dams, reservoirs, sand removal works, pipelines, etc. We have hydraulic engineers and hydrologists with vast experience in the analysis and design of hydraulic systems of rain and sewage.



BOSQUE

Bosque is a Costa Rica - based brand design studio.

We believe that great brands start from within, and live in the hearts and minds of the people that come in touch with them.

The integration of a strategic approach with thoughtful, distinctive and opinionated visual languages allow the creation of memorable and recognizable identities that live far beyond bidimensional brand experiences.

Brand Strategic Positioning & Development.

Naming.

Visual Identity Systems.

Print & Digital Collateral Materials.

Packaging Design.

Environmental & Experiential Design.

Signage & Wayfinding.

Clients of Environmental Graphics/ Signage/Wayfinding

Sep 2017 - Oct 2020

Bayer/NTT Data/Ciudad del Este /Mckinsey & Co./Gran Hotel Costa Rica/Uber/Akamai/Dint/ Caricaco/Align Technology/Sagicor /Coopedota/Encore/Blue Sat/Texas Tech University/Stryker/Sfera Legal /Portafolio Inmobiliario/Nueve 84 /AR Holdings/Cumpanis/Simple Clean Eatery/GIZ/Intaco/Roche /Amazon/Escazú Village Fase 2 /Delegación de la Unión Europea /Lincoln Plaza/The Hive/Leumi Business Center/Atmos Campus de Neaocios/Vmware/Establishment Labs/Teradyne/ALCCI/Bacard/BNP Paribas/Code Development Group/ Sencha Tea Bar/Pfizer/Viatris

BOSQUE



Bayer

Project:

Service Center Costa Rica

Location:

AFZ Free Trade Zone, Barreal, Heredia

Services:

Focus group Schematic Design Design Development Construction Documents Construction Permitting Bidding process Construction process Size: 5000 m2 Budget: \$6 000 000 Schedule:

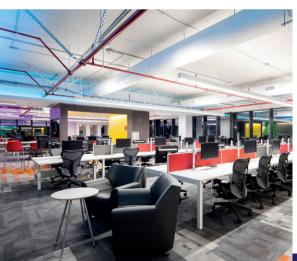
4 phases, time per phase: Design process 10-12 weeks Construction process 12 weeks



Bayer, Heredia. Costa Rica











We Work Costa Rica

Project:

Corporate Offices

Location:

Heredia, Costa Rica

Services:

Due deligence

Design Development (in coordination with WW México) Construction Documents Construction Permitting Bidding process Construction process Size: 11 350 m2. Budget: \$9 000 000 Schedule: First phase 12 weeks Construction process 120 days 2019-2020







Cargill

Project: Electric System Redesign Location: San Rafael, Alajuela

Services:

Medium voltage electrical design including 4.25 MVA electrical substation. Low voltage electrical design. Lighting automation design

Equipment procurement support. Equipment Commisioning

Manufacturing MCC and

CEDI Dos Pinos, Alajuela. Costa Rica.



power systems. Legal permits process Size: 10 000 m2 Budget: \$3 000 000 Schedule: Design process 16 weeks Construction process 26 months



CEDI DOS PINOS Project: Distribution Center Location: Coyol, Alajuela Services: Schematic Design Design Development

2019-2020



Cargill, Alajuela. Costa



Construction Documents and permits Construction Process Size: 52 000 m2 Budget: Phase 1 \$4.2 million, Phase 2 \$1.3 million, Phase 3 \$1.0 million

Schedule:

3 phases, developed in 3 years

Coopervision

Project:

New Contact Lens Facilities

Location:

Heredia, Costa Rica

Services:

Construction commisioning Consultancy. Size: 20,000 m2. Budget: \$22 000 000 Schedule: First phase 15 weeks Construction process 120 days 2019-2020







Microvention

Project:

New Coyol Facilities

Location:

San Rafael, Alajuela Services:

Architectural, Structural and electromechanical design for new production facilities at Zona Franca Coyol.

Equipment procurement support.

Equipment Commisioning

Manufacturing MCC and power systems.

Legal permits process Size: 20 000 m2 Budget: \$30 000 000 Schedule: Design process 16 weeks Construction process 26 months 2019-2020







Admedes

Project:

Production and Warehouse

Location:

Zona Franca Coyol, Costa Rica

Size:

1800 m2

Services:

Arch, MEP, HVAC, Design and commisioning

Size:

1800 m2

Budget:

\$5 million Schedule:

Pre- construction, Biding process

2022





List of projects carried out in the last 4 years that prove our experience in complex projects, of different disciplines and needs.

LIST OF RELEVANT EXPERIENCES							
Project	Description	Size	Year	Owner			
Coopervision	Mechanical, Fire Protection and VAC designs/Energy consumption and Load Management at New Contact Lens Facility	20000m2	2013-2014	Coopervision			
Abbot Cardio Vascular	Economical/Technical Feasibility study to install Ice Storage Device (ISD)+Economical and Technical Feasibility study to install Condenser Heat Recovery to offset Electric RH Control	15000m2	2013-2014	Abbot Cardio Vascular			
Phillips Nicoya	Architectural, Structural and electromechanical design for clean room upgrade.	2000m2	2020-2021	Phillips			
Microvention	Architectural, Structural and electromechanical design for new production facilities at Zona Franca Coyol.	20000m2	2020-2021	Microvention			
Distribution Center (CEDI) Wal- mart, Coyol de Alajuela.			2012	Wallmart			
Business Building Cargill	ill Building offices, and offices from productive areas.		2015-2016	Cargill			
Santa Ana Town Center	nter Comercial and Gastronomic Plaza, with offices Building.		2017-2018	Urban Edge			
Cedi Cargill	i Cargill Building offices, cafeteria, clinic, laboratories and productive areas.		2017	Cargill			
Selinas Hostels-cowork	inas Hostels-cowork Diferents location of Selinas's Hostels in Cancún, Mexico.		2018	Selina			
CITI Services Center	Building D, level 4 of Cafetal Business center, Belén_Heredia.	1800m2	2018	Citi			
Corporacion PIPASA	prporacion PIPASA Preliminary study and preliminary project of the factory, La Garita, Alajuela.		2015-2018	Cargill			
Bayer Costa Rica	Building C14 of AFZ free zone, Heredia.	5600m2	2017-2018-2019	Bayer			
We Work Costa Rica	Building C3 of Business and Comercial center[real Cariari", Heredia.	11324m2	2019	We Work			
Selinas Hostels-cowork	nas Hostels-cowork Diferent locations: Tamarindo, la Fortuna, Puerto Viejo, Nosara, Jaco and San josé, Costa Rica.		2017-2019	Selina			
Regus, Corporate Center	Offices restacking, level 6	1800m2	2019	Regus			
ICU Medical	ICU Medical Zona Franca	3600m2	2019	ICU			

COSTA RICA CLIENTS



3M ABB AC Hotels Accenture Acciona **ACP** Portugal Adeslas SegurCaixa AIG Alcampo Alcatel Allfunds Altran AT Kearney Atento Avuntamiento de Madrid Banca March BBVA Banco de Portuaal Banco Espirito Santo Banco Santander Bancopopular-e Bankia Banque Privée Edmond de Rothschild **Barclays Bank BnP** Paribas Belcorp **Boston Consulting Group Bristol Myers Squibb** British Petroleum

GLUBAI CHIFNTS

British Telecom Bureau Veritas Caixa Bank Caixa Geral de Depósitos Caterpillar Cesce Citroën CityBank Clear Channel Coca-Cola Codere Cofidis Colt Comunidad de Madrid Corió Costco Cruz Roia Cuatrecasas Danfoss Deka Immobilien Dentix Deutsche Bank DHL eBay EDP Renováveis El Economista Endesa Enersis **Everis**

Gobierno de España **Eulen** FCC Fox GALP Gas natural General electric Generalitat de Catalunva **Global** Crossina **Global Switch** Hewlett Packard Hispania H&M Ibercaja Iberia ING Bank Nationale nederlanden ING Real estate Indra Intrum Justitia Islalink Jazztel JB Capital Markets Johnson Controls JP Morgan Kellogg's KPMG Latham & Watkins Lilly

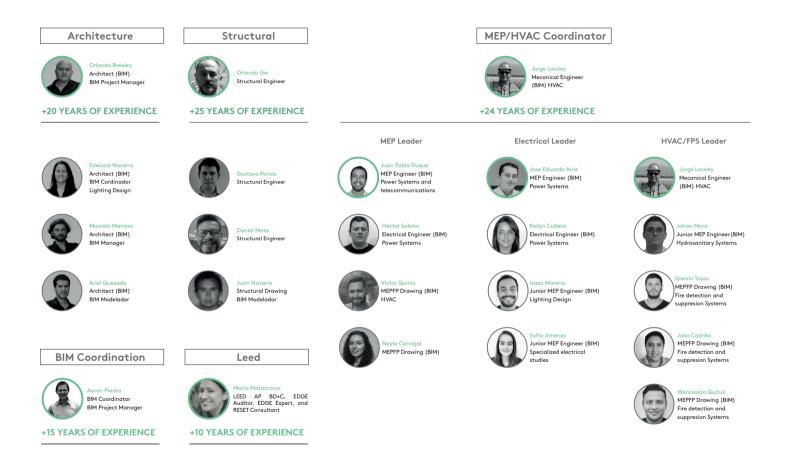
Loewe L'Oréal Miele Mckinsev McGraw Hill Merck Sharp Dohme Microsoft Mondelez Multiópticas Motorola MSC Software Nesspreso NH Hoteles Nokia Nueva Pescanova OHI Oliver Wyman Ono Oracle Oranae Pfizer Portugal Telecom Procter & Gamble **PSA** Finance **Redexis Gas** Regus Refer Telecom Renfe Repsol

Riofisa Roche **Roland Berger** Sanitas Sanofi SAP Sara Lee Seaaram Securitas Sephora Solvav Pharma Songe Standard & Poor's Talenta ΤΑΡ Telefónica Tetra Pak Tod's Uned Unidad Editorial Unilever Unisono Universidad de San diego Valentino Victoria Seguros VidaCaixa Vueling Vocento Vodafone



OUR GLOBAL CLIENTS

PROJECT TEAM



Relevant Experience

Empresa	Constructora / Cliente	Contacto	Teléfono	Correo	Proyecto	Niveles	Área (m2)
Estruconsult	Volio y Trejos	Ing. Gerardo Volio	+506 2246-0339	gerardo volio@volioytrejos.com	Diseño estructural Cedi Walmart Coyol	2	52.000 m2
Estruconsult	Volio y Trejos	Ing. Gerardo Volio	+506 2246-0339	gerardo volio@volioytrejos.com	Diseño estructural Mercado Cenada PIMA Chorotega	1	22.000 m2
Estruconsult	Volio y Trejos	Ing. Gerardo Volio	+506 2246-0339	gerardo volio@volioytrejos.com	Diseño estructural Walmart Alajuela	2	43.500 m2
Estruconsult	Edificar	Ing. Román Salazar	+506 8863-3968	rsalazar@edificaronline.com	Diseño estructural Hotel y Casino Sheraton	8	12.000 m2
Estruconsult	Edificar	Ing. Román Salazar	+506 8863-3968	rsalazar@edificaronline.com	Diseño estructural Edificio Vista las Palmas	15	18.900 m2
Estruconsult	EVCO (Eliseo Vargas)	Ing. Federico Salazar	+506 2010-1000	fsalazar@evco.cr	Diseño estructural Mr. Bodeguitas Curridabat	7	7.000 m2
Estruconsult	Proycon	Ing. Luis Retena	+506 2543-1600	lretana@provcon.com	Diseño estructural Remodelaciones Oficinas Citi, Oficentro Cafetal	-	
3G Office	EVCO (Eliseo Vargas)	Ing. Gustavo Castro	+506 8868-0685		Diseño centro comercial Santa Ana Town Center	4	25.000 m2
3G Office	Proycon	Ing. Humberto Navarro	+506 8825-7299	hnavarro@proycon.com	Oficina en Cafetal Citi	5	6.500 m2
3G Office	Proycon	Ing. Max Fischel	+506 8341 6603	mfischel@proycon.com	Oficinas en Cafetal Nestlé	1	1.500 m2
					Edificio Sigma, compuesto por 2 edificio		
3G Office	Vanderlatt y Jiménez	Ing. Federico Acon	+506 8388-1920	Facon@vicr.net	comerciales mixtos y un eficio de 7 niveles de parqueo	7	55.000 m2
3G Office	Constructora Scala	Ing. Orlando Sibaja	+506 8918-8085	osibaja@scala.co.cr	Laboratorio de innovación Banco Promerica	1	450 m2
3G Office	Constructora AFZ	Ing. Andrés Madrigal	+506 8703-8083	amadrigal@americafreezone.com	Oficinas Citrix American Free Zone	1	1.800 m2
3G Office	Constructora AFZ	Ing. Gustavo Barrantes	+506 8703-9746	gbarrantes@americafreezone.com	Oficinas Bayer etapa 1 a la 5	3	6.000m2
					Diseño eléctrico planta de producción de piña,		
Grupo ABC	JyJ Electromecánica	Ing. Steven Jiménez	+506 8887-0158	siimenez@ivielectromecanica.com	Volcán Empacadora Sonador. Corporación del Monte	1	4.900 m2
Consorcio 3GEA	JyJ Electromecánica	Ing. Danny Jiménez	+506 8834-8209	djimenez@jyjelectromecanica.com	Diseño arquitectonico, estructural electromecanico del las mejoras internas del edificio C3, acondicionado para las oficinas de Wework Costa Rica	6	11.200 m2
	Bilco	Arq. Pedro Labarca	+506 7014-0672	pedro.labarca@bilcocr.com			
Grupo ABC	OPB Arquitectos	Marco Castro	+506 8338-3000	mcastro@opbarquitectos.com	Diagnostico de los sistemas electromecánicos, previo a la remodelación del Hotel Costa Rica	5	3.000 m2
Grupo ABC	Fusión Inmobiliaria	Ing. José Murillo	+506 8792-6767	jmurillo@parqueactiva.com	Diseño en Media y Baja tensión de Planta de Producción Extralum Grecia.	1	30.000 m2 / 3.5 MVA
Grupo ABC	Cargill Nutrition	Ing. David Serrano	+506 6010-2317		Diseño y Construcción remodelación eléctrica planta extrusora de alimento animal.	4	3.000 m2 / 3 MVA
Grupo ABC	Cargill Meats Costa Rica	Ing. Ricardo Paniagua	+506 7300-0686	<u>Ricardo Paniagua Marin@cargill.com</u>	Diseño y Construcción eléctrico remodelación eléctrica Planta procesadora de pollo San Rafael incluyendo la planta de tratamiento de aguas residuales	2	10.000 m2 / 4.5 MVA
Grupo ABC	Cargill Meats Costa Rica	Ing. Bernal Rodríguez	+506 6057 3856	Bernal Rodriguez Quiros@cargill.com	Diseño y Construcción eléctrica remodelación de los sistemas de potencia de Planta Productora de embutidos Tiquicia, Planta productora de embutidos Kimby y Planta productora de embutidos Cinta Azul	2	

Relevant Experience

Grupo ABC	Cargill Meats Costa Rica	Ing. Christian Corrales	+506 8856-9328	Christian Corrales Ruiz@cargill.com	Diseño y Construcción eléctrico nueva línea de producción extrusora Andritz, alimento animal, Planta Cobesa. Diseño y Homologacón de Sistema de Control Eléctrico junto a Empresa Andritz,	(5 1.5 MVA
Grupo ABC	РІМА	Ing. David Ovares	+506 8701-2869		Holanda. Rediseño y Construcción Ampliación de Programa Integral de Mercadeo Agropecuario		2.500 m2 / 500 kVA
Grupo ABC	Vicesa Costa Rica	Ing. Hugo Faba	+506 8705-0268	hfaba@grupovical.com	Diseño y Construcción de Ampliación de Planta y Sistema de Purificación de Gases de Hornos	1	650m2 / 750 kVA
Grupo ABC	Vega Voltios	Ing. José Vega	+506 8722 5636	jose.vega@vegavoltios.com	Diseño de la remodelación eléctrica para el respaldo de Hornos (proceso critico) de producción, planta Coopervision		500 kVA
AEG, Grupo ABC, Aaron Piedra	Cargill Corporativo	Ing. Fabio Duque		Fabio_Duque@cargill.com	Ingeniería de Detalle MP. Consultoría para el Diseño Arquitectónico, Civil, Estructural, Mecánico, Eléctrico y de Refrigeración para Proyecto del CEDI Cargill y Edificio Administrativo.		30.000 m2 / 5 MVA
Consorcio 3GEA	Coopervision	Ing. Miguel Porras	+506 8932 5834	MPorrasAlfaro@coopervision.com	Project Manager, Auditoria de diseño, construcción y puesta en marcha eléctrica y telecomunicaciones de edificio CR2	:	2 10.000 m2 / 2.5 MVA
Grupo ABC	Schneider Electric Costa Rica	Ing. Carlos Herrera	+506 8707 3873	carlos.r.herrera@schneider-electric.con	Especificación de equipos y pruebas FAT para clientes corporativos de Schneider Electric / Grupo (ABC. Estudios especializados para puesta en marcha de subestaciónes eléctricas en media tensión de clientes industriales. Proyectos Varios		-
Grupo ABC	Ingenio Santa Rosa (Panamá)	Ing. César Córdoba	+507 6401-1190	<u>ccordoba@azunal.com</u>	Diseño en MT y BT para Ampliación de Planta. Reubicación y operación de Generadores para interconexión con la red panameña de transmisión.	:	1 6.000 m2 / 10 MVA
Grupo ABC	BIMBO de Costa Rica	Ing. Luis Araujo	+506 7298-2110	laraugal@grupobimbo.com	Diseño remodelación eléctrica sistema de potencia subestación planta de producción de panes, Bimbo Costa Rica	:	1 3.000 m2 / 1.5 MVA
Aaron Piedra	DWL	Ing. Uri Lipszyc	+506 4101-8650	uri@dwlcr.com	Dirección BIM Planta Concentrados Coca-Cola	-	45.000 m2
Aaron Piedra	Piasa-Garnier	Arq. Mario Rivera	+506 2205-3660	marivera@garnierarquitectos.com	Asesoria BIM Estrategia BIM Walmart Centroamérica	-	5.000 m2
Aaron Piedra	Garnier /Garnier	Ing. Ernesto Jimenez	+506 2205-3623	ejimenez@garnier.cr	Dirección BIM Oficentro Sabana	-	18.500 m2
Aaron Piedra	Constructora Estructuras	Ing. Fabian Matamoros	+506 2279-0232	fmatamoros@estructurassa.com	Modelado BIM Auditorio ANDE	-	5.000 m2
Aaron Piedra	Zona Franca La Lima	Ing. Tanya Harwood	+506 8701-8558	tharwood@garnier.cr	Direccion BIM Coloplast	-	30.000 m2
Aaron Piedra	AEISA	Ing. Juan Sebastian Marir		jsmarin@aeisa.net	Direccion BIM Nota Escalante	-	10.000 m2
Aaron Piedra	GPO españa	Arq. Roger Beaumont Sa	. ,		Modelado BIM GPO	-	10.000 m2
Aaron Piedra	Arquitecto Daniel Lacayo	Arq. Jose Francisco Chava		jchavarria@lacayoarquitectos.com	Direccion BIM ODM , banco central	-	23.500 m2
Aaron Piedra Aaron Piedra	Arquitecto Alberto Reifer Modus Operandi MO	Arq. Gustavo Ocampo Arg. Fabian Villamichel	+506 2288-5000 +506 8841-1894	lgocampo@reiferarquitectos.com fvillamichel@moconsultores.com	Direccion BIM Banco Popular Direccion BIM Vive Tibas	-	23.000 m2 15.000 m2
Aaron Piedra	Arg. Javier Salinas	Arg.Lou Vanzky Guthrie		lguthrie@jsarquitectos.com	Direccion BIM Asamblea Legislativa	-	60.000 m2
Aaron Pleura	Ary, Javier Jaillias	Arg. Lou varizky Gulfine	- 300 000-0313	igutime@jsarquitectos.com	Direction billi Asamplea Legislativa	-	00.000 M2



Orlando Brealey Architecture Leader

Bio

multigenerational group with extensive experience in

building developments, banks, shopping centers, core and shell and interiors. From the planning phase,

Specialized in the use of digital technology for the design, development and construction of projects

performing as Project Manager, Technical Director, Project Architect, Technical Director, Project Architect

Relevant Experience

Coopervision, ZFC, 2019-2020

ICU Medical, 2019

SIGMA Corporate Center, 2016

SANTA ANA TOWN CENTER, CR, 2017-2018

Orlando worked in the design of the core and shell as well as the gastronomic plaza that is his main attraction, he was the architect who designed the

WE WORK, CR in process, 2019

responsibility of advising the foreign investors and

CITI Services Iternational Center, 2016 (LEED)

Orlando worked as the Architect project with our

capacities and qualities of service, that is why from

Bayer Services Iternational Center, 2017-2018 (LEED)



We all ready did phase 1,2 and 3. At this moment we



Orlando Gei Structural Engineer

Bio

Orlando, Engineer, studied at the University of Costa Rica, specializing in a Master's Degree in Structural Engineering since 1994.

Member in Professional Associations:

CFIA, Federated College of Engineers and Architects of Costa Rica

CIC, College of Civil Engineers of Costa Rica

ACIE, Costa Rican Association of Structural Engineers

ACI-CR, Costa Rican Association American Concrete Institute

IABSE, International Association for Bridges and Structural Engineering, Switzerland

ASCE, American Institute for Civil Engineers, US SEI, Institute of Structural Engineering, USA

Since 1999 he founded together with a partner Estruconsult SA. Today as CEO he directs in a very personalized way each project that comes to his hands. Careful of the details and good customer services, achieving lasting relationships with their customers.

Relevant Experience

Chorotega Regional Market, Guanacaste.

The project is an agri-food center, where its area of influence is made up of 11 cantons of Guanacaste and 1 canton of Alajuela.

As well as Nicoya communities. We worked on the structural and architectural design of the project. Work supervision was also carried out

Size: 22400 M2

Year: 2018-2019

Distribution Center (CEDI) Walmart, Coyol de Alajuela.

The structure of the project is made up of the steel frame type system and prefabricated concrete enclosures.

Orlando led the consulting group in structural design and supervision.

Size: 52 700 m2 Year: 2012

Industrial plant of Confecciones Burkar, for Ropa Internacional, Poás de Alajuela.

Services of analysis of design, supervision of work and

management of the project in its entirety were offered.

Size: 1500 m2, Year: 1997

Orlando, along with its consulting company, has participated in large projects at an international level, covering the Central American Region and even Mexico.

They have been made : sismic vulnerability studies, reinforcements, remodeling and the structural designs of complex works.

México: Casinos Coatzacoaltas (Veracruz) and Casino Crown City Beautiful Villa (Tabasco)

Belize: Estacipon and Balneareo Itzana (Placencia) Nicatagua: Hotel Hyatt (Managua) and Infrastructure of Guacalito (Rivas)

Panama: Bilingual Maria Auxiliadora School (Amajan) and Bodegas el Darién Verde (Darién)

Guatemala: Aliied Contact Center Building (Las Charcas) and Escuintlá Agency Warehouse (Escuintlá)

El Salvador: assessment and vulnerability study of Walmart (San Salvador)



Jorge Lossley Mechanical Engineer Leader

Bio

Mechanical Engineer from the University of Costa Rica with a Master's Degree in Renewable Energy Systems Management obtained from the University of Flensburg, Germany.

Visiting Professor on the part of international academic DAAD program. Beneficiary of the DAAD scholarship program for professionals and under which the MSc degree was obtained.

25+ years of professional experience in planning, design, inspection and project management in air conditioning systems, fire protection systems, plumbing, conservation and energy management.

Jorge has developed projects in Free Zones in Costa Rica and counts among its client portfolio the main medical industry companies installed in the country, being a service provider in infrastructure, construction, remodeling, improvement continuous, management and energy management. It has been characterized by offering innovative proposals to customers, being pioneers in establishing energy storage systems for air conditioning (Ice banks) in the Coyol Free Trade Zone, as well as the use of rejection heat from cooling systems for humidity control in clean rooms

Relevant Experience

Coopervision, **ZFC**, **2019-2020** Design review and commissioning of the new production plan addition, currently working on a 600 people per shift Cafeteria.

We Work, 2019-2020 HVAC Design and inspection.

Coopervision, ZFC, 2013 - 2014 Mechanical, Fire Protection and VAC designs / Energy consumption and Load Management at New Contact Lens Facility, 2700 cooling tons, district cooling and RH control by condenser heat rejection, saving 1.6 MW power demand.

Abbott CardioVascular, ZFC, 2013-2014 Economical and Technical Feasibility study to install lce Storage Device (ISD) which will offset peak demand by 600 kW with a payback less than 3 years. Economical and Technical Feasibility study to install Condenser Heat Recovery to offset Electric RH Control, saving 0.6 MW power demand with back less than 9 months

Boston Scientific Propark, 2011 Economical and Technical Feasibility study to install Ice Storage Device (ISD) which will offset peak demand by 600 kW with a payback less than 3 years

Boston Scientific Global Park, 2011 Economical and Technical Feasibility study to install ISD which will offset peak demand by 200 kW with a payback less than 3 years. **INCA Banacol Sardinal**, **2010** Mechanical and VAC designs for 5500 m2 Pineapple processing plant

Hospira Holding CR4 office building, 2010 Mechanical, FPS and VAV DX type AC System design for a 7.500 m2, 3 stories building.

Pricesmart Corporation, 2010 Mechanical, Fire Protection and VAC designs / Energy consumption and Load Management at Latin America facilities. (Guatemala, Honduras, Nicaragua, Salvador, Costa Rica, Panama, Colombia, Dominican Republic and other Caribbean island)

Novapark, 2009 Mechanical, Fire Protection and VAC designs for a 20.000 m2 Distribution Center and a 35.000 m2 Plastic Molding Manufacturing plant.

Oficentro El Cedral, 2009 Mechanical, Fire Protection and VAC designs for a 38.000 m2 office building park.

Multiplaza Mall V stage, 2009 Mechanical, Fire Protection and VAC designs for a 74.000 m2 shopping mall.

Avenida Escazu AE2 Combined use building, 2009

Mechanical, Fire Protection and VAC designs for a 25.000 m2 building.



Juan Pablo Duque Electromechanical Engineer Leader

Bio

Electromecahnical engineer, graduated from "Instituto Tecnológico de Costa Rica" and "Colegio Federado de Ingenieros y Arquitectos" (CFIA) active member since 2010, Juan Pablo is currently Grupo ABC Technical and Design leader.

Through his profesional career, he's been involved in multiple high complexity residential, comercial and industrial projects. Always proposing innovative and cost-time effective solutions.

With a complete commitment with energy efficient proceses and carbon print reduction, Juan Pablo has promoted and developed multiple programs for our business, his team and clients.

Completely identified with an structured way of work, is the Procore's promoter and implementation leader for the consortium.

His experience and leadership has been developing and maturing for the last 10 years in the organization and its complemented with his involvement in most consulting design projects.

Relevant Experience

Coopervision, **ZFC**, **2019-2020** Design review and commissioning of the new production plan addition.

Wework, Costa Rica, 2019

Leader of electromechanical design for the development of a high density project and Wework's first building in Costa Rica.

Size: 11.000 m2

Ingenio Santa Rosa, Panamá, 2018

Leader of redesign of the power distribution system of the sugar production plant. Independent steam generation system with an installed capacity of 8.5 MVA

Size: 8.5 MVA

Cargill, Costa Rica, 2017

Leader of electromechanical design of Cargill Distribution Center (CEDI) and support buildings as administrative and productive offices, clinic, dining room, Quality Laboratories. 13,000 m2 production plant, 3,000 m2 support buildings. Power 4 MVA

Size: 16.000 m2, 4 MVA

Cargill Administrative building and production offices, 2015-2016

Electromechanical design of the administrative master plan of the San Rafael production complex. Including all MEPFP disciplines

Size: 3500m2



Jose Eduardo Arce Electromechanical Engineer

Bio

Grupo ABC Co-founder, José Eduardo is the General Manager and Marketing Director of the Company. He has more than 10 years of experience in electrical design, construction and maintenance. He has extensive experience in administration, cost management and strategic management. For more than nine years he has also devoted himself to the teaching of electrical engineering and has given conferences at local and international conferences.

Bim knowledge, and Procore, Revit MEP, ETAP, PTW SKM, Dialux software use.

Colegio de Ingenieros Tecnólogos (CITEC): Professor for Profesional update program courses.

Colegio de Ingenieros Tecnólogos (CITEC): Electrical Board active member where security, code, courses and projects are discussed and developed.

Asociación Salvadoreña de Industriales (ASI): Professor of Energy Efficiency program, Module 7. "Energy Quality".

Relevant Experience

Corporación PIPASA- Planta Garita, Electrical Design.

Extrusiones de Aluminio S.A. "EXTRALUM"

Fire protection system design Planta Cartago.

Corporación PIPASA- Planta Garita. Preliminar Studies and design development.

Corporación PIPASA- Planta San Rafael. Design and Construction document nationalization Planta TicoFruit

Study of short-circuit and protections coordination.

Corporación PIPASA- Electrical design of 25 chicken growth facilities La Garita, Carbonal y Siquiares, Alajuela. Electrical power systems Master Plan.

Planta Aguilar y Solís, Belen.

Electrical design Planta Belén, Alajuela.

Extrusiones de Aluminio S.A. "EXTRALUM"

MEPFP Electromechanical design of Extralum new process facility. 30.000 m2 Grecia, Alajuela

Corporación PIPASA- Planta San Rafael



Thermotec de Centroamérica S.A.

Electrical construction "Red de Frio"

Programa de Integración del Mercado Agropecuario, PIMA, Barreal de Heredia

Corporación PIPASA- Planta Extruder, La Garita Alajuela

Electric design and construction. Extruder Process. Facility Extruder. La Garita, Alajuela

Corporación PIPASA- Planta Cinta Azúl

Electric design and construction. Cinta Azul. El Tejar, Alajuela.

Productora La Florida S.A.

Electrical diagnosis and electrical maintenance service to three substations of Florida Bebidas, Cristal Plant with a total of 9 MVA: bank capacitors, transformers, medium voltage conductors, electrical tests on power circuit breakers, cleaning and condition verification.



Aaron Piedra BIM Manager

Bio

Aaron is a specialist in modeling and BIM documentation of Revit Architecture, Revit Structure, Revit MEP 2016, as well as review and collaboration of BIM models of Naviswork Manage 2016.

He has the certificates of Professional Certification Revit Architecture 2012, and Revit Architecture 2009 Advance.

He has extensive experience in BIM modeling and will be responsible for coordinating everything related to this topic in the project.

Certified Revit professional with over 10 years of proven experience.

His specialty based on BIM modeling and documentation covers the technologies: revit structure, revit MEP 2020 and Naviswork management 20202.

He has also trained business teams (and / or collaborated on projects) with different architectural, engineering and construction firms.

Relevant Experience

Wallmart Centraamérica. 2019. BIM Implementation at Piasa-Garnier.

Coloplast, 2019-2020. Zona Franca la Lima, 2019-2020, BIM Coordinator

We Work General Cañas, 2019. BIM Coordinator

EEISA, Nota Escalante, 2019. MEP-BIM Coordinator

Constructora Estructuras, 2019. BIM Coordinator in construction process

CEDI , Carguill. 2018. BIM Coordinator

Multitenant 2, Zfla Lima, 2018. BIM Coordinator

Planta de concentrados Coca-Cola,DWL, 2018-2020. BIM Coordinator in construction process

Banco Popular, Reifer, 2018. BIM Coordinator

ODM building, Lacayo 2017. BIM Coordinator

Terminal APM , ICICOR, 2016. BIM Coordinator

Asamblea Legislativa, Salinas, 2015. BIM Coordinator

Pellas Development Group, Nanku, 2015. BIM Coordinator

Zona Franca coyol, 2014-2020. BIM manager



Athrocare, ZFC, 2014. BIM manager

Revit Architecture 2013 Instructor

Bilco Constructora, 2013. BIM Modelling

Dalab Design, 2013. BIM Manager

Polini Martinez Arquitetos, 2013. BIM Manager. Revit and Navisworks 2013 coordinator.

Mo Consultores, Enero 2012- Actual. BIM Manager . evit and Navisworks 2013 coordinator.

Caja Costarricense del Seguro Social, 2012. BIM instructor

ARS Arquitectura e Ingeniería, 2012. BIM instructor

ACL Arquitectura e Ingeniería, 2012. BIM instructor

IECA Internacional, 2012. BIM-Structure instructor

Instructor en Revit Architecture y Structure 2012.

EDICA Empresa constructora, 2012. BIM instructor

Circuito, 2012. BIM-MEP instructor



Hector Solano Electromechanic Engineer

Bio

-Electromechanoc Engineer graduated from Universidad Tecnológico de Costa Rica. He has more than 14 years of experience in design and inspection. For more than nine years he has also devoted himself to the teaching of electrical engineering and has given conferences at local and international conferences.

Hector adaasd advance knowledge and experience in mechanic and electric systems due a conitnious learning passion, creating an specialist in diferent fields: power supply systems, network technologies, fire detection, automatization systems control; and in mechanical systems as fire supression system, general plumbing, medical gases, etc. Every proyect that eng. Hector involves are develop over a high technical level with an additional commintment a nd responsability vision.

Relevant Experience

Administradora fiduciaria ZM2

Design and inspection of fire detection and supression system all over the existing industrial plant. Size 8100m2

Lonza costa rica s.A

Fire detection and supression system all over the nev Costa Rica Lonza Offices . Size 2550m2.

Extrusiones de aluminio s.A

Fire detection and supression system all over Costa Rica glass plant expansion . Size 2700m2.

Junta de educación escuela juanito mora porras.

Design and inspection of Fire detection and supression system. Size: 3 154 m2

Caja costarricense de seguro socia

Design and inspection of Fire detection and supression system for the disposal collection center. Size 1037m2.

Calle nicata sociedad anónimo

Procter & gamble interamericas de costa rica.

Junta administrativa liceo de chacarita

Design and inspection of Fire detection and supression system for the new highschool in Chacaritar. Size 11,390m2.

Planta Krypton

Design and inspection of Fire detection and supression system and infraestructure for the new Kripton industrial plant. Size 4311 m2.

Administradora bambú sociedad anónima .

Design and inspection of Fire detection and supression system for Comercial area and entrepreneur center of Siloparkr. Size 2 495m2.

PROJECT UNDERSTANDING

PROJECT KICK OFF	30% DESIGN REVIEW	60% DESIGN REVIEW	90% DESIGN REVIEW	BIDDING AND PERMIT PROCESS	
The KICK OFF	30 % DESIGN REVIEW	60 % DESIGN REVIEW	90 % DESIGN REVIEW		IFC DOCUMENTS
Consider the customer needs, Site conditions, project constrains and legal requirements Brings together the ideas and concepts which provide a holistic solution to the problem Quantitative and qualitative evaluation of proposals	Basis of Design General Load Estimation Long Lead Item Definition Systems General Layout	One Line Diagrams Schedule and Submittals of LLI Bidding type layouts Space requirements Initial system coordination	Documents for bidding process Scope of Work Sequence of Operation Technical Specifications		Approval by authorities Revision of Construction Bids Integration of Value Engineering and clarifications Customer approval
DEFINE THE CONCEPT	DEFINE THE TYPE OF SYSTEMS, LAYOUTS AND GENERAL LOADS	DEFINE LLI, ONE LINES AND INITIAL COST ESTIMATION	BEGINNING OF PERMIT AND BIDDING		CONSTRUCTION DOCUMENTS
GOALS					

Approach

PLANNING

RESPONSIBLE	ROLES	TOOLS		R
Director and/or Senior Engineer	Define the concepts Define the delivery schedule Define the scope work Provide relevant information in terms of needs, constrains,			Di Se
	or needs, constrains, expectation Revise manpower	Program- ming templates		Pr
Project Engineer	Estimates the manpower			Dr Di
Draftsmen Director	Estimates the manpower			
Scheduler	Revise the manpower resources and alloca- tes the staff to meet schedule	Manpower Balance worksheet		Sc

MONITORING

RESPONSIBLE	ROLES	TOOLS
Director and/or Senior Engineer	Revision of design progress Revision of design quality Desicion on manpower allocation and/or re-organization of duties	Quality control templates Scheduler report
Project Engineer	Design and revision	Design suites, codes, stan- dards
Draftsmen Director	Drawing coordination	
Scheduler	Provides progress reports to Director on weekly basis Prepares report on working load and highlights to Director organization of staff to meet schedule	Programming templates Manpower Balance wor- ksheet

EVALUATION

RESPONSIBLE	ROLES	TOOLS
Director and/or Senior Engineer	Wrap up information and defines in con- junction with project staff a lessons learned plan and improve- ment considerations	LL Staff mee- ting Agenda
Project Engineer	Provides project infor- mation on quantity of drawings, reworking	Control tem- plates
Draftsmen Director	Provides project infor- mation on quantity of drawings, reworking	Control tem- plates
Scheduler	Provides a summary of the project in terms of schedule and manpower	Summary report

Standards and Methodology



1 We are customer oriented.

2 We believe in teamwork.

3 We are commited to quality, time and cost.

4 We seek the customer satisfaction and longterm relationship.

5 We provide added value that leads to improvements in business productivity.

6 We apply our extensive international experience in all phases of the project.

7 We seek efficiency and sustainability in our projects. We belong to USGBC and LEED certification.

8 We develop our projects under the highest quality standards ISO 9001:2008

9 We create trends. We apply the most modern facilities and most innovative designs.

Our Strengths

Analysis and conceptualization of projects from the perspective of good operational maintenance.

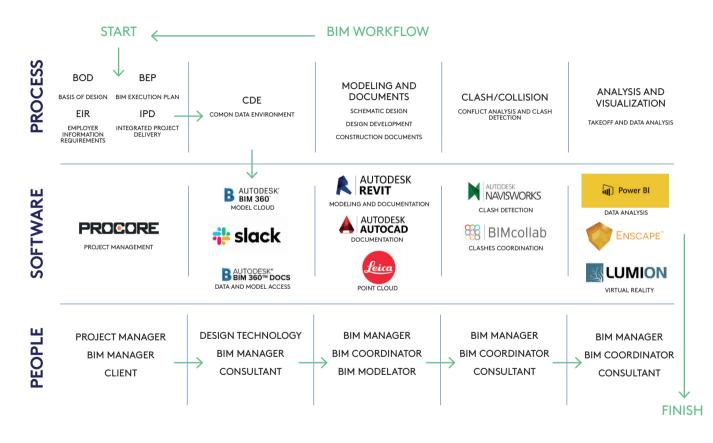
Professionals with international development in different types of projects, which will be your personal contacts.

Project Protafolio of wide complexity resolved in time and to the satisfaction of the clients. Application of technologies for the development, monitoring and quality control of projects.

We offer advice on direct contracts with suppliers and our client for a good management of budgets.

PROJECT MANAGER NAVISWORK + PROCORE

Architectural	Revit BIM Lumion
Structural engineering	Saaab
Electrical engineering Plumbing engineering and Fire protection	ETAP_ power system simulation Revit -BIM Dialux- lighting analysis Scheider Fast Quote
Mechanical Engineering	Revit BIM CFD
	Tool BOX



MANGLAR BESIENTIVE







PM Operation Development

Projects are developed under a cloud-based platform for project management categorize as one of the best global project's development app, PROCORE. Procore connects people, applications, and devices through a unified platform that provide the best tools to secure an optimal project development through data tracking, task visualization, tracking and budget management, key elements to manage conscious risk assessment and a quality project development. Procore compiles tools for Project Management, Project Finance, Quality and Safety, and Productivity for all its projects.

Project users, clients, designers, owners, inspectors, are offered a platform where they can store, share and manage plans. An intuitive dashboard controls all team members' items on going tasks as follows:

- RFI (Request for information)
- Who is delaying submittals
- Overdue days on the project schedule.
- Multiple project tasks status in real time.
- Observations pending with a resolution.
- Meetings items pending for closure with its corresponding responsible resource.



RFIs



Specifications

 \Box

Tasks

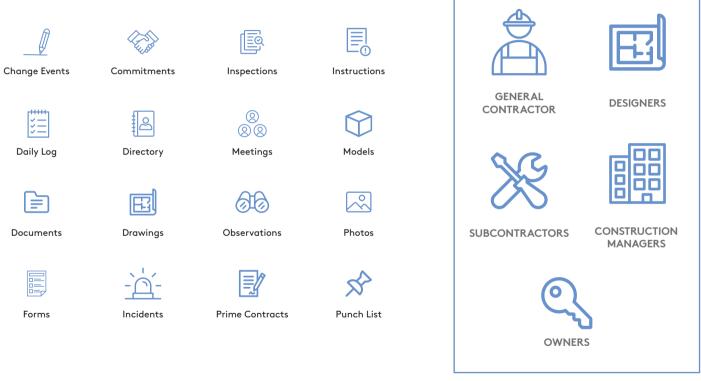


Schedule

Connectivity

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CONTACT PERSON

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