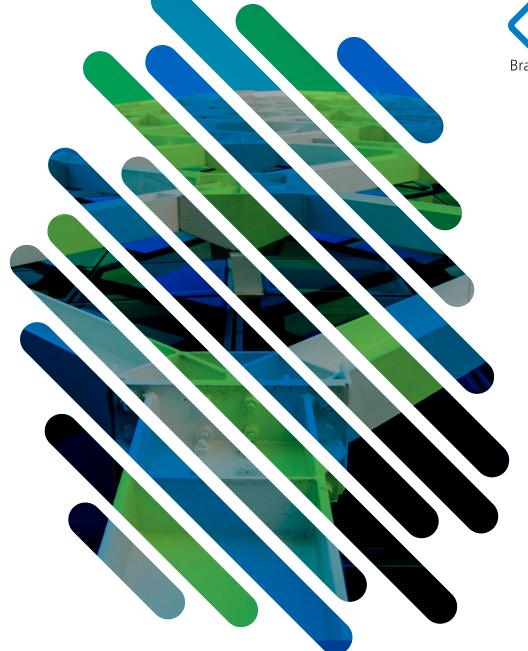


ACTIVITIES REPORT **2017**



MANAGER:





message from the Managing Director

In 2017, the Brazilian economy began to show some signs of improvement, but this was insufficient to ensure the Brazilian steel industry's recovery from the worst crisis in its history. Domestic sales of steel, traditionally an indicator of the financial health of other important sectors within the domestic economy, grew a mere 2.3% last year in comparison with 2016, totalling 16.9m tons. It is worth noting here that imports grew ten times more than domestic sales: 14.3% in terms of volume (a total of 15.4m tons) in 2017 compared to 2016. If one considers that the apparent consumption of steel (19.2m tons in 2017) is the sum of domestic sales plus imports, minus imports by the steel plants, then one can conclude that the domestic market still has a good deal of room to grow, especially if it uses Brazilian steel.

Reflecting the downturn experienced in the civil construction sector, the steel structures sector contracted 43% in terms of output in 2016 if compared to 2015, this according to a report produced by the CBCA in partnership with ABCEM (Brazilian Association of Metal Construction). Hopeful of a recovery in Brazil's economic growth, especially in the civil construction sector, important in terms of employment generation, the CBCA completed 15 years in 2017 encouraging the use of metal structures in this sector.

Among the many initiatives carried out by the CBCA in disseminating and supporting the technological development of this segment last year, one should highlight the revision and launch of the new manual entitled "Projeto e Durabilidade" ("Project and Durability"), and 13 events held across Brazil (in Maceió, Salvador, Aracaju, Belém, São Luis, Teresina, Fortaleza, Natal, Recife, João Pessoa, Brasília, Cuiabá and Manaus). The purpose of these events was to provide more information about industrialized steel construction to professionals in the civil construction market and to students taking civil engineering and architecture courses. One should also

mention a series of surveys carried out in partnership with ABCEM (Conditions facing Steel Structure Manufacturers; Conditions facing Manufacturers of Galvanized Steel Sections for Light Steel Frame and Drywall, and; Conditions facing Steel Roofing and Steel Deck Manufacturers), and the 10th Edition of the CBCA Competition for Students of Architecture, which once again achieved a record number of registered competitors (485 in all, from 199 different universities).

Indeed, this Competition has proved to be an excellent strategy for establishing links with students of architecture, especially in view of the limited amount of knowledge specific to this area offered in most undergraduate programs. As part of its aim to produce content, the CBCA also worked on a number of editorials focusing on topics relating to the segment in two editions of its main publication, the "Revista Arquitetura & Aço" ("Architecture and Steel Magazine"); as well as on continuously updating its "Guia Brasil da Construção em Aço" ("Brazilian Guide to Steel Construction"), an innovative initiative that maps and disseminates the entire productive chain involved in steel construction in Brazil. Video-classes and classroom courses were once again offered in 2017, to fully meet the demand for better access to information on this constructive system.

The CBCA will continue to encourage the promotion of industrialized construction using metal structures, in the hope that 2018 will mark an effective resumption in growth, generating more business and more jobs. It also believes that industrialized construction should be viewed as the prime alternative for meeting any kind of demand, especially that of an urgent or short-term nature, thereby ensuring growth that is both productive and sustainable.

Marcos Eduardo Faraco







SUMMARY

1. PARTNERS | 08

2. MANAGEMENT | 09

3. HIGHLIGHTS | 10

4. STATISTICAL DATA | 11

- Interpretation and Publication of Statistical Data 11
 - Surveys 12

5. PROMOTION AND DISSEMINATION | 14

- CBCA Website 14
 - Site Map 15
- Construction Works Databank 16
- Revista Arquitetura & Aço (Architecture & Steel Magazine) 17
 - Publications 17
 - Media 18
 - CBCA News 18
 - Interviews 18
 - RoadShow CBCA 19
 - CBCA Competition 20
 - Photo Competition via Facebook 21
 - Events and Lectures 22

6. PARTNERSHIPS | 24

- Exchange Programs with Similar International Organizations 24
 - Domestic Entities 25
 - Universities 26
 - Communication and Training Vehicles 26

7. PROMOTION AND QUALITY STANDARDISATION | 28

8. DEVELOPMENT OF TECHNICAL MATERIAL | 30

- Revista da Estrutura de Aço (Steel Structures Magazine) 30
 - Guia Brasil da Construção em Aço (Brazilian 31
 - Guide to Steel Construction)
 - Advertorials 32
 - Steel Construction Manuals 33

9. QUALIFICATION OF LABOUR | 35

- Video Classes 35
- Course Promotion 36



PARTNERS

MANAGERS

ArcelorMittal Tubarão

CSN

Gerdau

Usiminas

COLLABORATORS

Aperam

ArcelorMittal Aços Longos

Gerdau Aços Longos S.A.

Vallourec Tubos do Brasil S.A.

Votorantim Siderurgia S.A.

COMPANIES

Almeida Nascimento Estruturas Metálicas

Ananda Telhas

Allmas - All Metal Assembly Indústria

Barbieri

Bemarco Estruturas

Blat Estruturas Metálicas

Brasilit

CBMM - Cia. Bras. de Metal. e Mineração

Center Steel Eng. Light Steel Framing

Comercial Gerdau

Companies that became members in 2017

Grupo Pizzinatto

ISOESTE Construtivos Isotérmicos

ISOTECH Soluções Acústicas

Kofar

Perfilor ArcelorMittal

Perfinaço

Pré Moldado Planalto

Smart Sistemas Construtivos

Soluções Usiminas

SteelPack Perfilados

Tuper



Executive Director

Marcos Eduardo Faraco Wahrhaftig

Management Committee

ArcelorMittal Tubarão Eduardo Fares Zanotti

CSN Luis Fernando Barbosa Martinez

Gerdau Marcos Eduardo Faraco Wahrhaftig

Usiminas Ascânio Merrighi de Figueiredo Silva

Aço Brasil Débora Oliveira

Executive Commission

ArcelorMittal Tubarão Silvia Scalzo / Glaucia Bortolon Bissoli

CSN Eneida Jardim

Gerdau Marcelo Chang Baldino / Janaina Maria da Silva

Executive Management

Executive Manager Carolina Fonseca

Marketing and Training Coordinator _____ Ricardo Fausch Werneck

Communication and Press Coordinator _____ Rafael Silva

HIGHLIGHTS



1

Manual Projeto e Durabilidade (Project and Durability Manual)

Breakfast with companies affiliated to the CBCA







3

RoadShow in 13 cities

Students of Architecture Competition





INTERPRETATION AND PUBLICATION OF STATISTICAL DATA

Every year, the CBCA (Brazilian Centre for Steel Construction), in partnership with ABCEM (Brazilian Association of Metal Construction) carry out a series of surveys to determine the profiles of manufacturers of:

Steel Structures; Steel Roofing and Steel Deck; Galvanized Steel Sections for Light Steel Frame and Drywall.

In general, the domestic economic and political scenario led to a significant drop in the volume of construction works, with a negative impact on the result of the segments analysed. During the survey, we identified various companies that had ceased to operate altogether, and obtained a number of reports attesting to lower sales volumes.

A number of companies had invested in expanding their production capacity during the boom years of the Brazilian economy. Consequently, the year in question (2016) saw idle capacity rise considerably in relation to previous reported years.

The survey of the Profile of Steel Structure Manufacturers has been produced since 2012, and is now in its 6th edition. The results presented here refer to the year 2016, and cover 262 companies in all. With output of 694,000 tons in 2016 and an estimated turnover of around R\$4 billion, the companies surveyed employed some 26,000 workers. The macroeconomic scenario had a major impact on the sector, which operated at around 43% of its installed productive capacity.

The 5th edition of the report on the Profile of Steel Roofing and Steel Deck Manufacturers, surveyed 108 companies who produced 452,000 tons. These manufacturers employed some 9,500 workers and reported an approximate turnover of R\$2.5 billion.

Brazil's political and economic scenario also had an impact on the manufacturers of steel roofing and steel deck. More than 80% of the companies surveyed reported a drop in their output in 2016 when compared to 2015. Nevertheless, the sector remained optimistic in relation to 2017. Of every 3 companies surveyed, 2 were projecting some degree of growth, with nearly 30% expecting growth rates of up to 5%.

Finally, the survey on the Conditions facing Manufacturers of Galvanized Steel Sections for Light Steel Frame and Drywall, in its 4th edition, included 23 companies. There was a change in the methodology used and the results produced cannot be compared with those of previous editions.

The production of galvanized sections for Light Steel Frame in 2016 totalled 12.7 million tons, using just 23% of installed productive capacity. In the case of galvanized sections for Drywall, production totalled 43.7 million tons, using 31% of installed capacity. The manufacturers of sections for Light Steel Frame and for Drywall employed around 1,700 people and turnover was in the region of R\$238 million.

Manufacturers in this segment were optimistic, and more than 70% of the companies expected growth in 2017.

Through its annual publication of these surveys of Manufacturers of Metal Structures, Steel Roofing and Steel Deck, and Galvanized Steel Sections for Light Steel Frame and Drywall, the CBCA hopes to contribute to a better understanding of this important link within the productive chain of Construction. The CBCA also aims to highlight the dynamic of the segment and show its evolution as an important element within Civil Construction as a whole.

SURVEYS

PROFILE OF STEEL STRUCTURE MANUFACTURERS



The aim of the survey is to make a diagnosis, better understand the sector and, ultimately, to find the best way in which to develop the market. The estimate is that it represents around 75% of the universe of production in Brazil.

The steel structures market was badly affected by the macroeconomic scenario in Brazil. The lack of investment and low volumes in construction projects led 73 companies to either close or to change their business activities altogether. In addition, 21 companies declined to take part in the survey in 2017, some of them claiming that they did not want to divulge their results because they were very poor.

Ever since 2014, the sector has experienced a fall in its production volumes. In 2016, 694,000 tons of structures were produced, representing a drop of 43% in relation to 2015

The sector currently has an installed production capacity of 1.6 million tons p.a., of which only 43% was effectively utilized in 2016. This, therefore, means that in 2017 there is scope to produce twice as much as in the previous year.

Business leaders in the sector are cautious and just over 50% do not expect to grow this year. Their projections for 2017 are to at best maintain existing output levels, or to grow marginally, but only to pre-crisis levels.

PROFILE OF STEEL ROOFING & STEEL DECK MANUFACTURERS



Brazil's political and economic scenario also had a negative impact on manufacturers of steel roofing (wall and roofing panels) and steel deck. More than 80% of the companies surveyed saw a drop in production and, in the case of steel deck, two companies stopped supplying this product altogether. In 2016, the sector used only half its total installed capacity, suggesting that in 2017 it could produce twice as much as in the previous year.

With regard to the data provided in this publication, the steel roofing manufacturers produced around 452,000 tons in 2016, employed more than 9,500 workers and had a turnover of in the region of R\$2.5 billion.

These numbers cannot be compared with those of previous years, partly because of the addition of large scale steel roofing manufacturers to the survey, and partly because of changes in the survey methodology.

With regard to 2017, the companies showed a certain degree of optimism. Almost two thirds of those interviewed expected sales growth, largely based on results obtained in the first quarter of 2017.

CONDITIONS FACING MANUFACTURERS OF GALVANIZED STEEL SECTIONS FOR LIGHT STEEL FRAME AND DRYWALL



The dry construction market, particularly the segment of sections for LSF and Drywall, was very badly hit by the country's economic crisis, especially as it was a system that was still new to some segments.

The Drywall system is part of the Federal Government's Sectoral Program of Quality (PSQ), which periodically inspects and monitors whether the sections of the Drywall is being used comply with the minimum standards set down in ABNT NORM 15217, which aim to ensure the quality of the products available in the market.

If one considers current installed productive capacity, then the sector is fully capable of meeting an increase in demand in the domestic market throughout Brazil, with the capacity to supply more than three times current output. Data in this publication also shows that the manufacturers of sections for LSF and Drywall jointly produced around 56,426 tones, employed 1,683 workers and had a turnover of around R\$238 million in 2016. More than 70% of the companies surveyed maintained a degree of optimism for 2017, projecting some degree of growth in relation to the previous year.

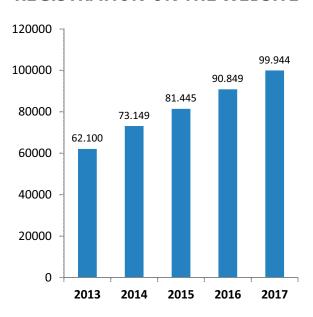
Activities Report 2017 | CBCA - Brazilian Center of Steel Construction



CBCA WEBSITE



REGISTRATION ON THE WEBSITE



14

PROMOTION AND DISSEMINATION

VISITS TO THE WEBSITE

286.709 2017 RECORD: 31.462 (MAR) 785.5 / DAY

280.293 2016

RECORD: 30.984 (OUT)

210.330

2015

RECORD: 21.788 (SET)

287.538

2014

RECORD: 38.960 (MAI)

SITE MAP



PROMOTION AND DISSEMINATION

CONSTRUCTION WORKS DATABANK



Integration with the Brazilian Guide to Steel Construction (Guia Brasil da Construção em Aço) using a link to the suppliers registered for each construction project. Steel construction is increasingly popular In Brazil.

In order to catalogue and list all the construction projects that have employed steel in Brazil, the CBCA created its Construction Works Databank – a system that lists all such works and projects according to typology, category of utilization, designers, and structure manufacturers.

The Construction Works Databank aims to highlight the steel construction chain of production as well as offering a bank of ideas and construction processes.

16

- > Building typology
- > Utilization category
- > Architecture
- > Structural engineering
- > Structures manufacturer

Activities Report 2017 | CBCA - Brazilian Center of Steel Construction

REVISTA ARQUITETURA & AÇO (ARCHITECTURE & STEEL MAGAZINE)



N° 49 Nordeste

33.494 VISITS TO THE MAGAZINES' WEB PAGE

4.880 DOWNLOADS OF MAGAZINES



N° 50 Centro-Oeste

PUBLICATIONS

Number of Manuals, Books, Magazines and Videos sent to Universities, Professors and Professionals:

26.378

2017

2016: 21.128 **2015:** 40.091 **2014:** 21.879 **2013:** 53.332

11.279
DOWNLOADS OF TECHNICAL
ARTICLES AND NOTES

MEDIA

CBCA NEWS

Created in 2010 and offered on a weekly basis.



259.533 VIEWS BY READERS OF CBCA NEWS

72 CONTENT LIST

6 INTERVIEWS PUBLISHED: Jornal Valor Econômico, Jornal Diário do Comércio, Revista Siderurgia Brasil, Revista Tem Sustentável, Revista Finestra and Site Construmarket

ARTICLES PUBLISHED ON THE ACTIVITIES OF THE CBCA IN DIFFERENT MEDIA VEHICLES, AND

ESPECIALLY: Jornal Diário de Pernambuco, Jornal Extra, Portal ArchDaily, Portal AECWeb, Portal Metálica, Revista Construção Mercado and Revista Grandes Construções.





251
APPEARANCES IN THE MEDIA
21 IN THE PRINTED PRESS / 230 ON THE WEB

ROADSHOW

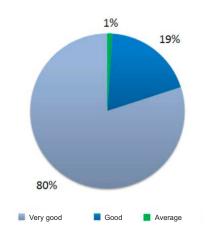
ON THE CONCEPT OF STEEL CONSTRUCTION

A national circuit of technical lectures held in three cities, aimed at showing how a project can be successful if one uses metallic structures. The lecturers were architect Sérgio Sampaio and engineer Flávio Gaiga (Cities: Manaus, Brasília and Cuiabá).

Profile of Participants

Engineer	21%
Architect	13%
Businessman/ Builder/Administrator/Technician	16%
Student	50%

Grading of Lectures



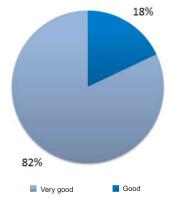
STEEL STRUCTURES – PROJECT, SPECIFICATIONS AND PROTECTING AGAINST CORROSION

A national circuit of technical lectures held in ten coastal cities. The focus of this project was on steel protection technologies, and especially on the protection of steel structures against the process of corrosion and the specifics involved. The lecturers involved included engineers Djaniro Álvaro de Souza (Gerdau) and Wander Pacheco Vieira (ArcelorMittal). (Cities: Maceió, Salvador, Aracaju, Belém, São Luis, Teresina, Fortaleza, Natal, Recife and João Pessoa).

Profile of Participants

32%
6%
10%
52%

Grading of Lectures



915 TOTAL NUMBER OF PARTICIPANTS



Road Show Salvador

THE CBCA COMPETITION FOR STUDENTS OF ARCHITECTURE

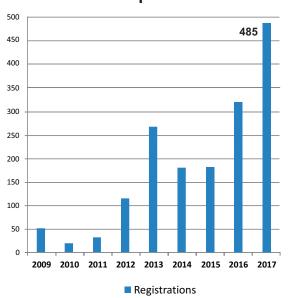
Theme: Nursery and Kindergarten

The aim of this Competition is to encourage the creativity of students of architecture in projects using steel structures. In 2017, the Competition attracted record numbers of competitors, with 485 registrations received from 199 universities and from 24 Brazilian states.

The awards ceremony was held in São Paulo, in October.

The winning team in the CBCA Competition went on to represent Brazil at the ALECERO Contest, in Cancun, Mexico.

Growth in Participation



1st Placed

Universidade Presbiteriana Mackenzie (SP)

2nd Placed

Universidade Federal da Bahia (BA)

3rd Placed

Universidade do Vale do Rio dos Sinos (RS)

Special Mention I

Universidade Presbiteriana Mackenzie (SP)

Special Mention II

Universidade Federal de Minas Gerais (MG)

57.085
VISITS IN THE
YEAR
(60,4% NEW
VISITORS)

1.781 TEAMS REGISTERED (2008-2017) 176.294 VIEWS

> Engines: Desktop: 80,3% Mobile: 18,3% Tablet: 1,4%

♦ CBCA





Winning teams receiving their awards in São Paulo.



20

PROMOTION AND DISSEMINATION

PHOTO CONTEST VIA FACEBOOK

9.462 LIKES PARTICIPANTS 87

facebook

18.492

SAW AND/OR LIKED THE PHOTOS IN THE CONTEST

9.030 PEOPLE REACHED



EVENTS AND LECTURES

RUN BY THE CBCA

From Concept to Construction in Steel:

May – 70 people attended (AM) September – 85 people attended (DF) October – 80 people attended (MT)

Steel Structures – Project, Specifications and Protection against Corrosion:

June – 50 people attended (AL)

June – 161 people attended (BA)

June – 40 people attended (SE)

September – 32 people attended (PA)

September – 50 people attended (MA)

September – 58 people attended (PI)

October – 76 people attended (CE)

October – 68 people attended (RN)

October – 90 people attended (PE)

October – 55 people attended (PB)

Breakfast with CBCA Members/Partners:

March – 27 people attended (SP)

Presentation of the CBCA surveys and its Competition Awards ceremony:

October – 50 people attended (SP)

992 2016 2015	786
33 2 2015	1.029
DADTICIDANTO 2014	1.068
PARTICIPANTS 2014 2013	3.717
22.42	0 400

3: 3.717 **2012:** 2.488 **2011:** 3.650 **2010:** 1.157

SUPPORTED / SPONSORED

The Architecture Centre at the Paulista University – UNIP – São Jose dos Campos Unit – March – 280 people attending (SP)

The 2nd UFSJ Academic Civil Engineering Week – March – 300 people attending (MG)

CTE – Thematic Workshop – Innovation: product development, improving processes and business opportunities in construction – April – 161 people attending (SP)

89th ENIC - National Congress of the Construction Industry -May – 380 people attending (DF)

1st Regional Conference on Dry Construction – Light Steel Framing (MICHTEC) – May – 400 people attending (PE)

3rd SEAEC - Academic Civil Engineering Week at the Instituto Federal Goiano – May – 150 people attending (GO)

11th Civil Engineering Week at the Federal University of Uberlandia May – 350 people attending (MG)

Knowledge Week - Using Steel in Construction (UFBA / UNIV. CATOLICA / UNIJORGE / FSACS/RUY BARBOSA and UNIJORGE) 6 universities – May – 458 people attending (BA)

Light Steel Framing Workshop – BOX Institute of Architecture and Urbanism - May - 35 people attending (MG)

Industrialized Construction Seminar – SOBRATEMA – June - 35 people attending (SP)

Sinduscon-RS – Using the Light Steel Frame system as an external seal on buildings with multiple floors – June – 120 people attending (RS)

1st Regional Conference on Dry Construction – Light Steel Framing (MICHTEC) – August – 375 people attending (DF)

1st Academic Metallurgical Engineering Week at the IFRS Caxias do Sul – August – 80 students attending (RS)

The use of steel in construction using as a case study Terminal 2 at the International Airport of Belo Horizonte - MM Gerdau -Museu das Minas e do Metal – August – 79 people attending (MG)

PARTICIPANTS 7.082

6th Academic Week at the FURG School of Engineering – August/ September – 800 people attending (RS)

1st Academic Week – Federal Institute of Rio Grande do Sul-August/September – 100 people attending (RS)

9th Academic Week of the Architecture and Urbanism Course at UFRRJ – September – 100 people attending (RJ)

1st Regional Conference on Dry Construction – Light Steel Framing (MICHTEC) – October – 422 people attending (RJ)

2nd Materials Engineering Week – UTF Academic Materials Engineering Centre – October – 170 people attending (PR)

Academic Architecture and Urbanism Week - UNISC - October -200 people attending (RS)

CTE – Conference of Directors and Managers in Construction – Outlook for construction and innovative management practices-November – 305 people attending (SP)

1st Regional Conference on Dry Construction – Light Steel Framing (MICHTEC) – November – 500 people attending (RS)

Sinduscon- Florianópolis – Using the Light Steel Frame system as an external seal on buildings with multiple floors – November – 133 people attending (SC)

State University of Campinas – Workshop on Passive Fire Protection: Metal Structures – November – 250 people attending

1st Forum of Civil Engineering Coordinators from the North and Northeast Fluminense Region – UENF – November – 500 people attending (RJ)

Sustainability and Technology in Architecture – University of de Cuiabá – UNIC – December – 83 people attending (MT)



EXCHANGE PROGRAMS WITH SIMILAR INTERNATIONAL ORGANIZATIONS



AISC – American Institute of Steel Construction

- Participation as a professional member, sharing Information to serve as the basis for preparing documents relating to the sector.



ALACERO – Asociación Latinoamericana del Acero

- Support, in the role of Technical Assistant, for the development and initiatives of the CODUA (Comité de Desarrollo del Uso del Acero).
- Coordination of Brazil's participation in the 10th ALACERO Steel Design Contest for Students of Architecture 2017.



CMM – Associação Portuguesa de Construção Metálica e Mista

- Maintaining an exchange of information and publications under the terms of the Protocol of Cooperation signed in 2007.

24

BRAZILIAN ENTITIES

AARS - Associação do Aço do Rio Grande do Sul

ABCEM - Associação Brasileira da Construção Metálica

ABCIC - Associação Brasileira da Construção Industrializada de Concreto

ABEA - Associação Brasileira de Ensino de Arquitetura e Urbanismo

ABECE - Associação Brasileira de Engenharia e Consultoria Estrutural

ABIMAQ - Associação de Máquinas e Equipamentos

ABINOX - Associação Brasileira do Aco Inoxidável

ABM - Associação Brasileira de Metalurgia, Materiais e Mineracão

ABNT - Associação Brasileira de Normas Técnicas

ABPE - Associação Brasileira de Pontes e Estruturas

ABRAESP – Associação Brasileira das Indústrias de Portas e Janelas Padronizadas

ABRAFATI - Associação Brasileira dos Fabricantes de Tintas

ABRAMAT - Associação Brasileira da Indústria de Materiais de Construcão

AsBEA - Associação Brasileira dos Escritórios de Arquitetura

CAU - Conselho de Arquitetura e Urbanismo (Departamentos AL / AM / BA / CE / DF / MA / MT / PA / PB / PI) CBCS - Conselho Brasileiro de Construção Sustentável

CBIC - Câmara Brasileira da Indústria da Construção

CREA - Conselho Regional de Engenharia e Agronomia (Departamentos AL / AM / BA / DF / MA / MT / PI / RN / SE)

CREA JR – Conselho Regional de Engenharia e Agronomia

DRYWALL - Associação Brasileira do Drywall

FDTE - Fundação para o Desenvolvimento Tecnológico da Engenharia

FIBRA – Federação das Indústrias do Distrito Federal

FIEMG - Federação das Indústrias do Estado de Minas Gerais

FIEMT - Federação das Indústrias no Estado de Mato Grosso

FIESP - Federação das Indústria do Estado de São Paulo

FIRJAN - Federação das Indústria do Estado do Rio de Janeiro

ICZ - Instituto de Metais Não Ferrosos

IAB - Instituto de Arquitetos do Brasil (Departamentos AM / BA / CE / DF / MA / MT / PA / PB / PE)

IE - Instituto de Engenharia

Senge (MT) - Sindicato dos Engenheiros do Estado de Mato Grosso SINDARQ – Sindicato dos Arquitetos e Urbanistas

SINDUSCON - Sindicato da Indústria da Construção Civil (Departamentos AL / AM / BA / DF / MA / MT / PA / PB / PE / PI / RN / SE / SP)

SOBRATEMA - Assoc. Bras. de Tecnologia para Equip. e Manutenção

PARTNERSHIPS

UNIVERSITIES

Centro Universitário Cesmac (AL)

Centro Universitário de João Pessoa (PB)

Centro Universitário de Várzea Grande (MT)

Centro Universitário DeVry Unifavip (PE)

Centro Universitário Uninovafapi (PI)

FACISA - Faculdade de Ciências Sociais Aplicadas

(Campina Grande)

Faculdade dos Guararapes (PE)

Faculdades IESP (PB)

Fametro (AM)

IESB Centro Universitário (DF)

Martha Falcão (AM)

Pitágoras (Unidades AL / MA)

Ruy Barbosa (BA)

UCS - Universidade Católica do Salvador (BA)

UFA - Universidade do Estado do Amazonas

UEMA - Universidade Estadual do Maranhão

UFAL - Universidade Federal de Alagoas

UFBA - Universidade Federal da Bahia

UFC - Universidade Federal do Ceará

UFMT - Universidade Federal de Mato Grosso

UFPB - Universidade Federal da Paraíba

UFPE - Universidade Federal de Pernambuco

UFPI - Universidade Federal do Piauí

UFRN - Universidade Federal do Rio Grande do Norte

UFS - Universidade Federal de Sergipe

Ulbra (AM)

UNB - Universidade de Brasília

UNEB - Universidade do Estado da Bahia

UNICEUB - Centro de Ensino Unificado de Brasília (DF)

UNIEURO - Centro Universitário Euroamericano (DF)

UNIFACS - Universidade Salvador (Feira de Santana - BA)

UNIFOR - Universidade de Fortaleza (CE)

UNINORTE - Centro Universitário do Norte (AM)

UNIP - Universidade Paulista (DF)

Universidade de Cuiabá (MT)

Universidade Estácio de Sá (Unidades BA / CE / SE)

Universidade Potiquar (RN)

Universidade Tiradentes (Unidades AL / SE)

Universidade UNINASSAU (PE)

COMMUNICATION AND TRAINING VEHICLES

Jornal Diário de Pernambuco

Jornal Diário do Comércio

Jornal do Commercio

Jornal Em Tempo

Jornal Extra

Jornal Tribuna do Norte

Jornal Valor Econômico

Portal Abece

Portal Abcem

Portal ABM

Portal AECWeb

Portal ArchDaily

Portal ArcoWeb

Portal Brasil Engenharia

Portal Engenharia Compartilhada

Portal Grandes Construções

Portal Inda

Portal Instituto de Engenharia

Portal Metálica

Portal Pini Téchne

Portal Portos e Navios

Portal Revista Edificar

Portal Tem Sustentável

Revista aU

Revista Construção Mercado

Revista Construção Metálica

Revista do Aco

Revista Edificar

Revista Estrutura

Revista Finestra

Revista Grandes Construções

Revista Projeto

Revista Siderurgia Brasil

Revista Téchne



PROMOTION AND QUALITY STANDARDISATION

TECHNICAL STANDARDS

Technical Standards backed by the CBCA

CE-02:125.05 – Steel and Mixed Material Bridge Project Study Commission

Waiting for the text to be submitted to National Consultation.

CE-02:125.004 – Light Steel Framing Construction Systems Study Commission Meetings ongoing.

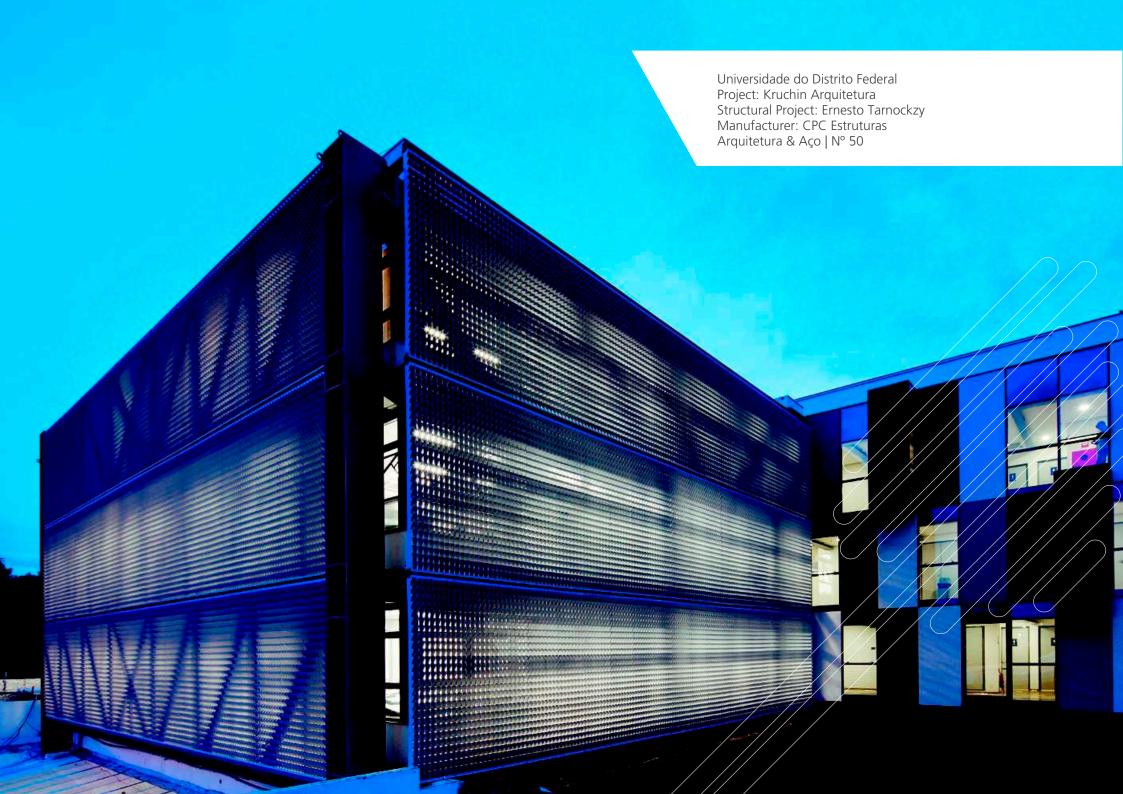
ABNT NBR 15217 – Steel Sections for construction systems using plaster board for "Drywall"-Requirements and testing methods
Revision of the text approved following its

Revision of the text approved following its distribution for national consultation. This revision will now be published on the ABNT website.

ABNT NBR 8800 – Project of steel and mixed material (steel and concrete) structures for buildings
The basic text revision meetings are underway at the ABECE with the participation of the CBCA.

CE-02:125.03 – Steel Structures Study Commission Meetings organized by the ABCEM with the CBCA taking part.





REVISTA DA ESTRUTURA DE AÇO (STEEL STRUCTURES MAGAZINE)

This magazine, supported by the CBCA, offers professionals the opportunity to publish their scientific articles or technical notes on subjects relating to steel structures and to mixed steel-concrete structures.

This publication, one of a scientific nature, has an editorial team that is both active and independent when it comes to assessing articles, and it has now published its 6th volume, with three editions (4 articles per edition), which are invariably produced by researchers from Brazil and Portugal.

In 2017, each article in the REA magazine received a DOI (Digital Object Identifier) number, which identified it as complying with ISO standards.





Aquário do Pantanal - MS

GUIA BRASIL DA CONSTRUÇÃO EM AÇO (BRAZILIAN GUIDE TO STEEL CONSTRUCTION)

The **Guia Brasil da Construção em Aço** represents an innovative initiative by the CBCA (Brazilian Centre of Steel Construction) supported by ABCEM (Brazilian Association of Metal Construction), aimed at boosting growth in the sector. It outlines and disseminates the chain of production involved in steel-based construction, offering consumers easier access to the different products, services and solutions available in the market.

The Guide is continuously updated to expand its scope and reach, incorporating new steel construction segments and new participants on an on-going basis.

60.807 PAGE VIEWS

33 NEW REGISTRATIONS

6.016 DOWNLOADS

30.690 VISITS

1.174
COMPANIES
PARTICIPANTS



Fabricantes











e fixação



The Guide is available on a website that can be accessed using a Smartphone or Tablet (IOS and Android)

Activities Report 2017 | CBCA - Brazilian Center of Steel Construction

ADVERTORIALS

REVISTA PROJETO DESIGN (DESIGN PROJECT MAGAZINE) FROM FEB TO DEC/2017

Steel Allows for Audacious Structures

10th CBCA Competition for students of architecture

Steel at the heart of airport's expansion

Green Retrofit with steel elements

Light Steel Framing speeds up construction of the Olympic Pavilion

339 ACCESSES IN THE CBCA WEBSITE

"Mola Structural Kits" were put into a draw for readers of the CBCA technical articles who signed up for the draw.

REVISTA ESTRUTURA (STRUCTURE MAGAZINE)

Planning of metallic structure interfaces

Protection against fire and corrosion

405
ACCESSES IN THE CBCA WEBSITE





32

Activities Report 2017 | CBCA - Brazilian Center of Steel Construction

STEEL CONSTRUCTION MANUALS



PROJECT AND DURABILITY (Revised, updated and reprinted)

53.414MANUAL DOWNLOADS

169.525 ACCESSES TO MANUALS

2017 Editions:

- Panels and Sealing (Reprint)
- Resistance to Fire in Steel Structures
 (Reprint)
- Metallic Structure Connections (Reprint)
- Surface Treatment and Painting (Reprint)

Editions programmed for 2018:

- Guide for Best Practices in Steel Construction in Buildings
- Manual of Competitiveness in Steel Structures
- Manual of Sustainability in Steel
 Construction
- Warehouses for General Use (Reprint)
- Transport and Assembly (Reprint)
- Small Buildings Structured in Steel (Reprint)

Produtora de Audiovisual - DF

Project: CoDA Arquitetos
Structural Project: Paulo Resende and Sander Nascimento
Manufacturer: Medabil Sistemas Construtivos S.A.

Arquitetura & Aço | N° 50



QUALIFICATION OF LABOUR

VIDEOCLASSES

The characteristics of steel construction

The economic viability of steel structures

Types of sections

Steel Connections

Transport and assembly of steel structures

Fire safety in buildings

Protection against corrosion

Structural steel

Structural concept

External seals and slabs



15.832 ACCESSES

9.732 VIEWS ON YOUTUBE

10.273 DOWNLOADS

The videos contain photos and animations and can be viewed by students individually or together with their professors, in the form of classroom material.

QUALIFICATION OF LABOUR

PROMOTING COURSES

Classroom Course

Rio de Janeiro

Introduction to the LSF Project and Calculation (March – 23 students)

Introduction to the LSF Project and Calculation (July – 22 students)

Introduction to the LSF Project and Calculation (October – 19 students)

São Paulo

(In partnership with SindusCon-SP)

Introduction to the LSF Project and Calculation (May – 13 students)

Rio Grande do Sul

The Steel and Concrete Structures for Buildings Project - Specialization course launched by Unisinos with the backing of the CBCA (May – 27 students)



Classroom course given at the Brazil Steel Institute - March



Classroom course given at the Brazil Steel Institute - October

104
TOTAL NUMBER OF STUDENTS

Shopping Flamboyant Project: Arquitetura Espacial and CDC Arquitetos Structural Project: Guiper Engenharia Ltda., Irontec Construção Metálica Ltda., MK Estruturas Metálica Ltda. and Colmeia Consultoria and Projetos Ltda. Manufacturer: Irontec Construção Metálica Ltda. and Pedra Grande Engenharia Ltda. Arquitetura & Aço | N° 50



ACTIVITIES REPORT **2017**

MANAGER:



www.cbca-acobrasil.org.br