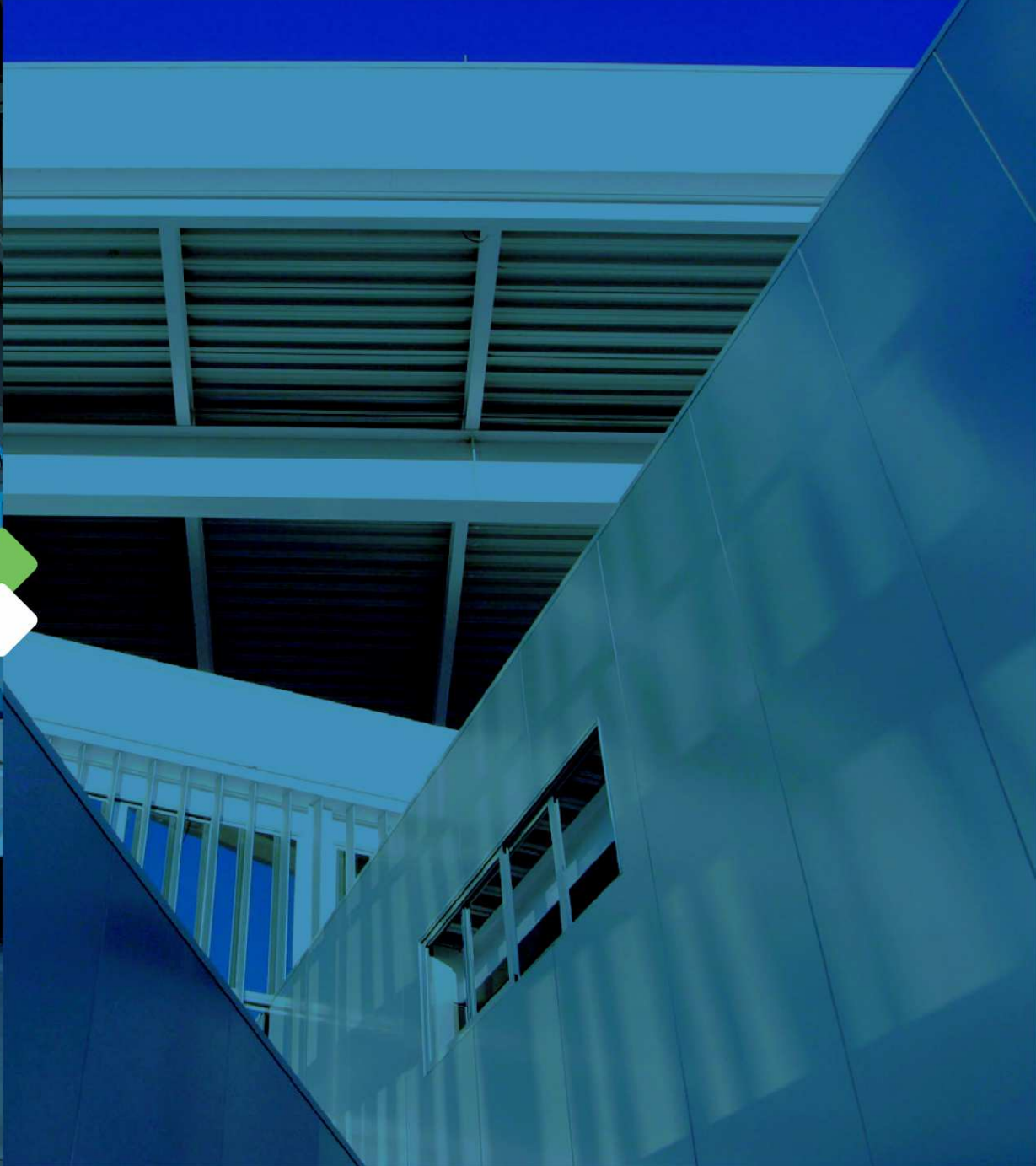


ACTIVITIES REPORT 2020



MANAGER:





MESSAGE FROM THE EXECUTIVE DIRECTOR

The Brazilian Steel Construction Center, as well as other class entities, companies and the whole country, was hit hard by the pandemic by covid-19, with a direct impact on several actions of the entity, which needed to reinvent the way of communicating and mainly the way to act in the face of this new reality. In addition to the various strategic virtual meetings held during the year 2020, always with the objective of defending and promoting the industrialized steel construction sector, it is worth highlighting the project of the CBCA Webinars, with relevant and current themes related to steel construction. The events were held on the entity's social networks and came to replace the already traditional itinerant RoadShows, held in person in several Brazilian cities. In all, nine Webinars were organized, with almost 6,500 participants, and an average of around 700 in each.

Another highlight was the continuation of more strategic work with other actions on CBCA's social networks, through weekly posts and disclosures targeted at certain audiences, including the continuation and improvement of the "Construction Transformers" series of videos, in which renowned experts who share the use of steel structures in their projects continued to be interviewed. All networks showed growth in the follower base, compared to 2019.

Also noteworthy was the 13th edition of the CBCA Competition for Architecture Students, which had 132 teams registered representing 88 Schools of Architecture and whose winner - the Universidade de São Paulo (USP) - also won the Latin American stage organized by Alacero; the launch of three more editions of Revista Arquitetura & Aço, now in digital and interactive format, with about 4 times more accesses than in 2019 - and the continuation of courses, with all the in-person course transforming to online in the first months of 2020,

because of social isolation. All had great public success, with numbers even greater than those verified in 2019. Still on the magazine, in the last edition of 2020, it's worth mentioning the article about ARENA MRV, the future stadium of Clube Atlético Mineiro, due to all its complexity and structural richness.

Disseminating steel construction through strategic partnerships was also one of the goals of 2020 and the CBCA participated in several online events of entities linked to the civil construction sector. It's worth mentioning at this point, the participation in the National Meeting of Engineering and Structural Consulting (ENECE), an event organized by the Brazilian Association of Engineering and Structural Consulting (ABECE), with more than 1,500 accesses in the CBCA lecture. Also noteworthy are the partnerships with AARS, ABCEM, ABITAM, ABM, ABRAINCO, ABPE, Drywall Association, IAB-RJ, ICZ and INDA.

In order to qualify the workforce, working with various topics related to the steel construction sector with students and professionals, the CBCA was also very close to academia, participating in several academic weeks online.

It is also worth mentioning the 2nd CBCA Competition for Engineering Students - Second Bridge between Brazil and Paraguay, with a virtual award made on the CBCA's Facebook page, with greater participation and engagement and with 41 teams registered, in addition to the launch of the entity's new website, done in December, closing this extremely challenging year.

MESSAGE FROM THE EXECUTIVE DIRECTOR

With regard to the steel structures sector - which had been suffering since 2014 with successive declines in production - the figures disclosed in the traditional CBCA annual survey “Scenario of the Steel Structure Manufacturers” were optimistic this time, in the 2019 x 2018 comparison. The Brazilian production of steel structures increased by 25.6%. It is worth remembering that the dynamics of each market segment served by steel structures have different behaviors. In 2019, energy works (wind, solar and transmission towers) and industrial buildings stood out. In the 2020 edition of the study, the 336 participating companies producing steel structures produced 822 thousand tons, with revenue of BRL 7.1 billion, and using 41% of their capacity, with 30 thousand employees. The tax burden was again one of the points most mentioned by the surveyed companies when asked about the main difficulties in promoting the use of steel structures in Brazil. Most affirm that, in comparison with molded systems on site, the metallic structure receives a higher incidence of ICMS taxation.

In addition to this research, last year the CBCA also released studies of the sectors of steel tiles & steel deck and galvanized profiles for light steel frame and drywall, also with a view to 2019. In relation to the first study, for the production estimated at 434 thousand tons and considering the capacity of one million tons of 118 companies, the occupancy rate of 42% was slightly higher than the 41% observed in 2018. The segment's revenue was BRL 3.3 billion and employed 13,400 employees in 2019. The second study mentioned presented a production of 62.6 thousand tons, with revenue of BRL 430 million, and with the performance of 2,286 employees in 2019.

The surveys also pointed to the need for greater capacity of the civil construction sector / training of labor to meet the growth of industrialized construction, which provides a reduction in time periods and costs due to gains in scale and increased productivity, in addition to the control of factory quality and systems standardization. The growth prospects for off-site construction are encouraging.

Finally, with the premise of always fighting for the quality of products and processes so that good practices are applied, CBCA was attentive to the regulations for new products that will be used in the steel construction sector.

With an optimistic outlook for 2021, the CBCA believes in the resumption of economic growth in Brazil, based on the expectation of a higher consumption of steel in civil construction and infrastructure works.

Ascanio Merrighi de Figueiredo Silva







Promote and expand the participation of steel construction in the national market, carrying out actions for its dissemination and supporting its technological development.

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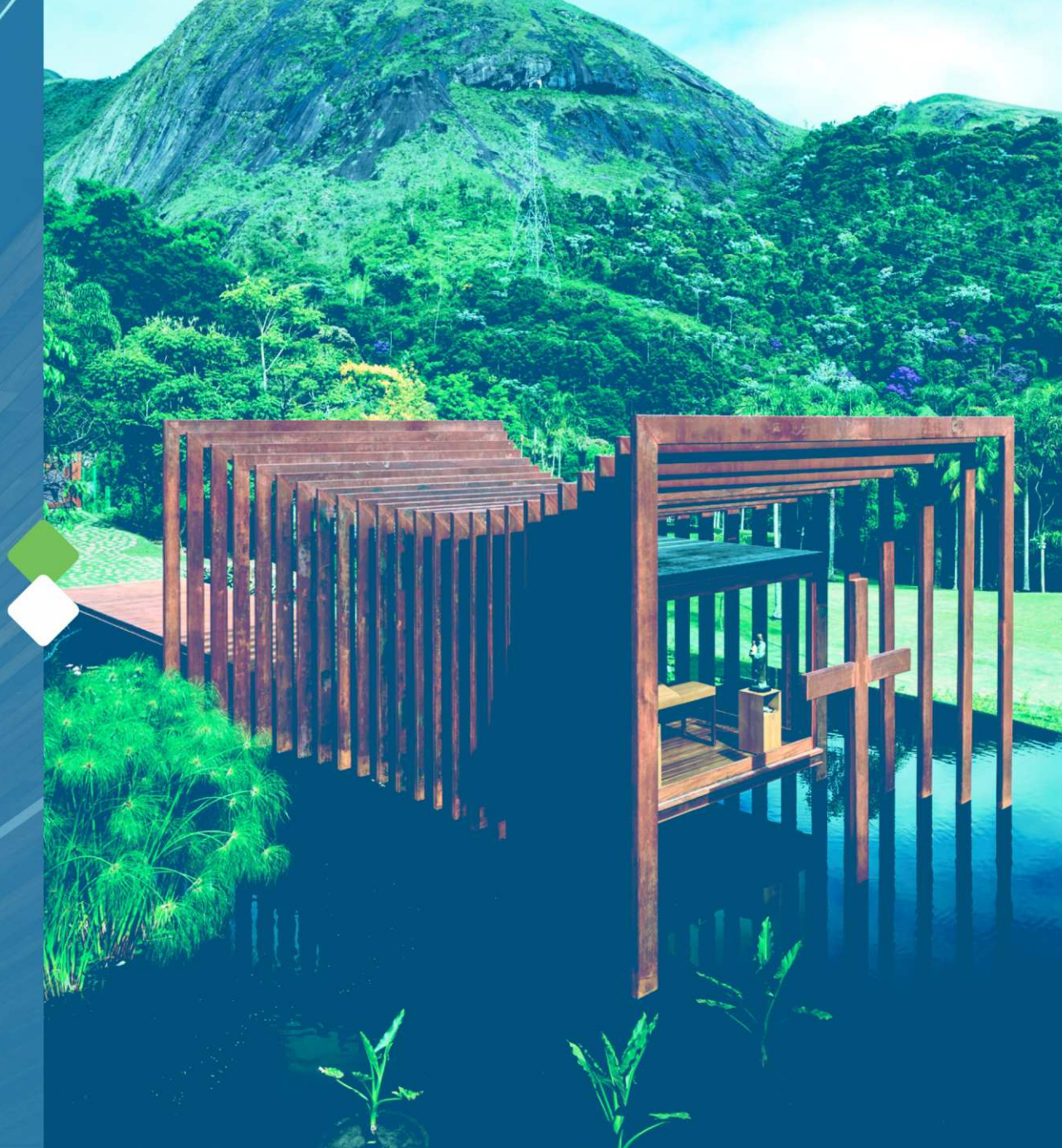
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CONSORTIUMS

MANAGERS


ArcelorMittal Tubarão
Gerdau Açominas S.A
Usiminas

EMPLOYEES

Aperam
ArcelorMittal Aços Longos
ArcelorMittal Sul Fluminense
Gerdau Aços Longos S.A.
Vallourec Tubos do Brasil S.A.

COMPANIES

Blat Estruturas Metálicas	ISOESTE Construtivos Isotérmicos
CBMM - Cia. Bras. de Metal. e Mineração	Perfilor ArcelorMittal
Center Steel Eng. Light Steel Framing	Perfinaço
Comercial Gerdau	Soluções Usiminas
Grupo Pizzinatto	Tuper
	Sinconstruct

 New companies

MANAGEMENT

Executive Director

Ascânio Merrighi de Figueiredo Silva

Management Committee

ArcelorMittal Tubarão	.....	Eduardo Fares Zanotti
Gerdau	.....	Cesar Obino da Rosa Peres
Usiminas	.....	Ascânio Merrighi de Figueiredo Silva

Executive Committee

ArcelorMittal Tubarão	.....	Silvia Scalzo / Alexandre Gama
Gerdau	.....	Rosane Beviláqua
Usiminas	.....	Humberto Bellei / Angela Guedes

Executive Management

Director	.....	Débora Oliveira
Executive Manager	.....	Rafael Silva
Marketing and Training Coordinator	...	Ricardo Werneck
Technical Advisor	.....	Isadora Arêas

HIGHLIGHTS



New CBCA
website



1st Place Alacero
Competition



Standard ABNT NBR
16.694 – Bridges
Project Highways of
Steel and Mixed
Steel and Concrete



HIGHLIGHTS



On-site courses
#FIQUEEMCASA
(Teams)



New Course
online Light Steel
Framing



Webinars



Revista
Arquitetura&Aço
Digital

STATISTICAL DATA

INTERPRETATION AND DISSEMINATION OF STATISTICAL DATA

Research by CBCA and ABCEM points to the need for greater training of the workforce to meet the growth of industrialized steel construction in Brazil

After accumulating successive declines over the past five years, Brazilian steel structure production increased by 25.6% in 2019, compared to 2018. This is what the survey “Scenario of Steel Structure Manufacturers” reveals, one of the three annual surveys of the Brazilian Steel Construction Center (CBCA) - an entity managed by the Instituto Aço Brasil - in partnership with the Brazilian Metal Construction Association (ABCEM). Besides this, the two entities annually conduct surveys with manufacturers of steel tiles and steel deck and galvanized profiles intended for drywall and light steel frame construction systems, to understand the market and help improve its competitiveness. The 2020 editions, made by E8 Inteligência, have just been completed, a little later than the history due to the difficulties caused by the pandemic of COVID-19.

The survey “Scenario of Steel Structure Manufacturers” points out that, since 2014, this market has been suffering with successive declines in production. When comparing the production of 2014 (peak) with that of 2018, for example, there is a reduction of more than 50%. However, in 2019, there was a recovery of 25.6%, compared to 2018. It is worth remembering that the dynamics of each market segment served by steel structures have different

behaviors. In 2019, energy works (wind, solar, and transmission towers) and industrial buildings stood out. In this year's edition, the 336 participating companies producing steel structures produced 822 thousand tons, with revenue of BRL 7.1 billion, and using 41% of their capacity, with 30 thousand employees.

In relation to the study “Scenario of the Manufacturers of Steel Tiles and Steel Deck”, for the production estimated at 434 thousand tons and considering the capacity of one million tons of 118 companies, the occupancy rate of 42% was slightly higher than the 41% observed in 2018. The segment's revenue was BRL 3.3 billion and employed 13,400 employees in 2019.

The companies participating in the survey “Scenario of Manufacturers of Galvanized Profiles - Light Steel Frame and Drywall” together produced 62.6 thousand tons, with sales of BRL 430 million and included the performance of 2,286 employees in 2019.

Among the internal difficulties, the lack of working capital was unanimously indicated as the main factor for the growth of companies in all these markets. Access to credit was another important factor. Tax costs were considered to have impacting negatively on the growth of the sectors surveyed.

The research also points to the need for more training in the civil construction sector/training of the

workforce to meet the growth of industrialized construction, which provides a reduction in time periods and cost due to gains in scale and increased productivity, in addition to quality control in the factory and standardization of systems. The prospects for growth in off-site construction, as has already been happening in 2020, are encouraging.

Research has been improving over the years and the results obtained are fundamental to subsidize entities in directing their actions, aiming to contribute to the development and strengthening of the industrialized steel construction sector in Brazil. It is estimated that the representativeness of each of them is 75% of its markets. The studies were designed to understand the areas in which companies operate, their dimensions and qualifications, in addition to their difficulties and growth needs.

Beginning in March 2020, taking 2019 as a base period, the beginning of the research work coincided with the arrival of the COVID-19 pandemic in Brazil, increasing the time necessary for all interviews to be carried out so that each study reached ideal levels of market representativeness.

STATISTICAL DATA

RESEARCH

3,959
VISITS / YEAR

SCENERY OF STEEL STRUCTURES MANUFACTURERS



In this year's edition, the 336 participating companies producing steel structures produced around 822 thousand tons, with revenue of BRL 7.1 billion and around 31,800 employees in 2019.

The year of 2019 had a growth of production in relation to 2018, reaching the highest level of the last 4 years.

Among the difficulties for the growth of the market, the lack of working capital, better qualification of employees and difficulty in credit approval stood out as the main internal factors. As external factors, the financial crisis, taxation and raw material costs were highlighted.

Consequently, they consider that actions to reduce taxation and disseminate the construction system are important to increase the competitiveness of this segment.

In its 9th edition, the research has been improved every year, being an important source of subsidy for directing actions to strengthen this market segment.

SCENARIO OF THE STEEL TILE & STEEL DECK MANUFACTURERS



In this year's edition, the participating companies producing steel tiles, closing panels and steel deck, together they produced around 434 thousand tons, with revenue of BRL 3.3 billion and included about 13,400 employees in 2019. In 2019, the sector of steel tiles and façade panels had a growth of 3.4% in relation to 2018. The steel deck sector grew by around 12%. However, steel deck represents 2.8% of the total and, being a smaller volume, variations in production generate higher percentage impacts. Among the difficulties for the growth of the market, the lack of working capital, improvements in internal processes and deficiency in marketing stood out as the main internal factors. As external factors, competition with lower quality products, raw material costs and taxation were the main items highlighted by manufacturers. Consequently, they consider that actions to reduce taxation and spread the use of quality products are important to increase the competitiveness of this segment.

In its 7th edition, the research has been improved every year, being an important source of subsidy for directing actions to strengthen this market segment.

SCENARIO OF MANUFACTURERS OF GALVANIZED PROFILES FOR LIGHT STEEL FRAME & DRYWALL

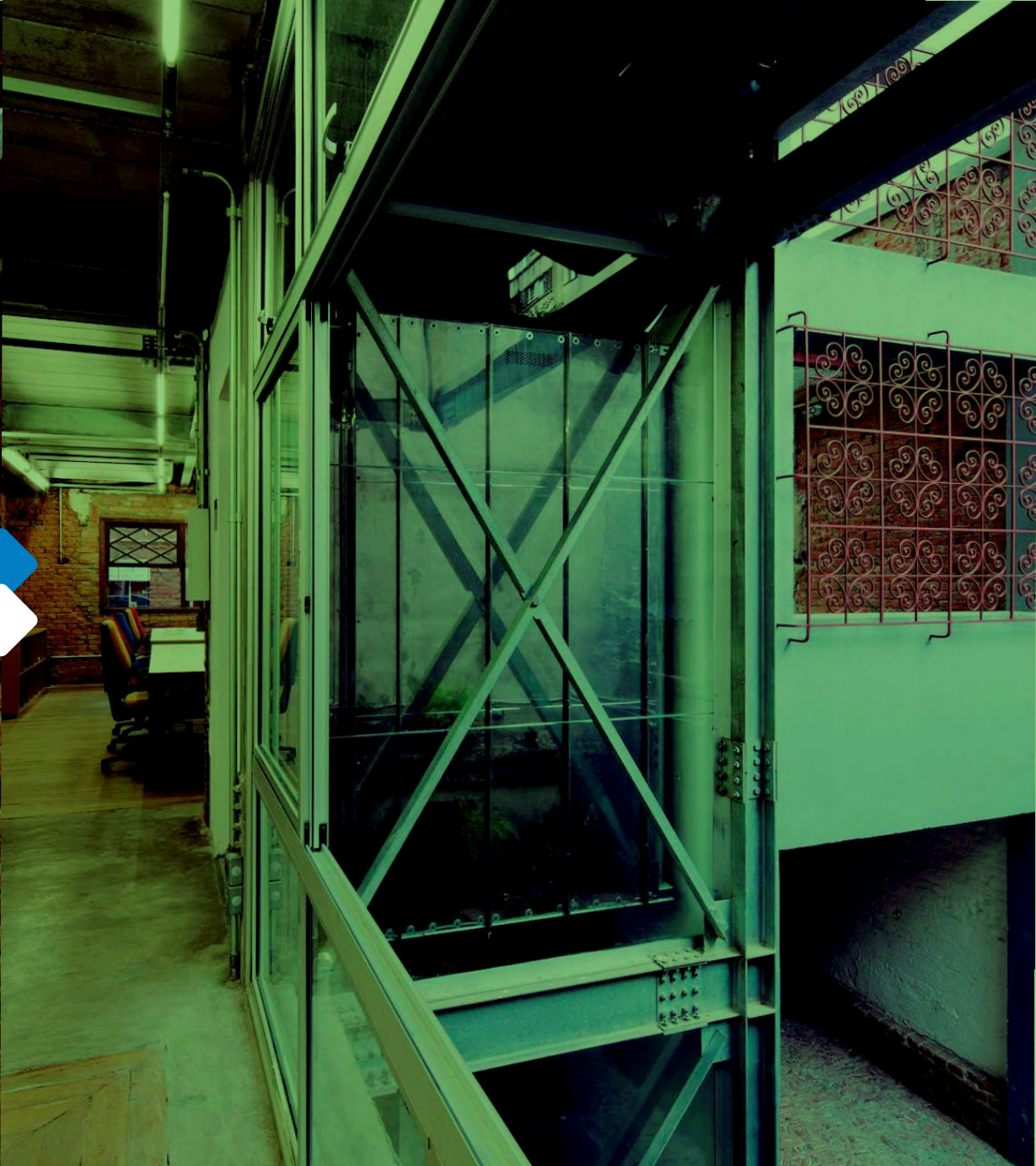


In this year's edition, the companies participating in profiles for Light Steel frame and Drywall, together produced around 62.6 thousand tons, with revenue of BRL 430 million and included 2,286 employees in 2019. The year 2019 was stable for the manufacturers of LSF profiles and positive for the manufacturers of profiles for Drywall, with growth of 5.3%. Despite the growth in production, there was a 10% reduction in the production capacity in the drywall profiles as some companies had idle capacity and reduced the machinery.

Among the difficulties for the growth of the market, the lack of working capital and management difficulties stood out as the main internal factors. As external factors, the lack of knowledge of the system and the low culture of use were the main items highlighted by the manufacturers.

Consequently, they consider that dissemination actions are important to spread the use and promote the growth of dry construction systems in Brazil.

In its 7th edition, the research has been improved every year, being an important source of subsidy for directing actions to strengthen this market segment.



PROMOTION & DISSEMINATION

CBCA SITE

267,053
VISITS / YEAR

DESKTOP: 128,132
MOBILE: 47,883
TABLET: 1,291



8,027
NEW
REGISTERED

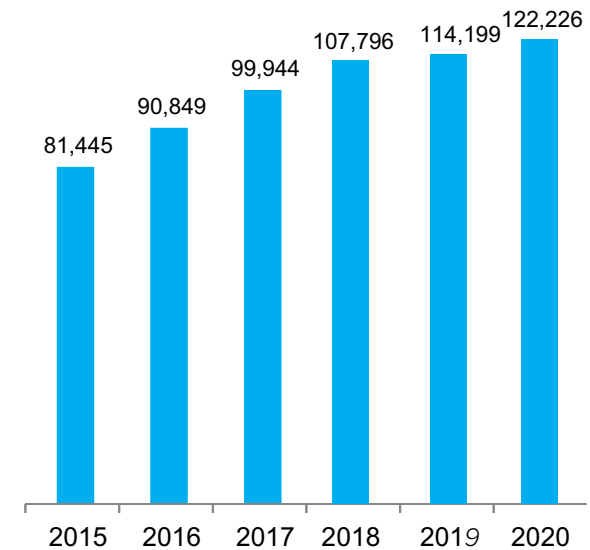
174,945
NEW VISITORS

(*) The measurement of the website is done based on Google Analytics

640,909
TOTAL OF PAGE
VIEWS

AVERAGE SESSION DURATION:
2:40s

REGISTRATIONS ON THE SITE



ENGLISH SITE NUMBERS

New users: 670
Page view: 1,197
Average session length: 01:17s
Most accessed page:
steel -construction-product-and-system.php

PROMOTION & DISSEMINATION

VISITS TO THE SITE | SITE MAP

267,053
2020

Record: 27,614 (JUL)
920,5 /dia

207,183
2019

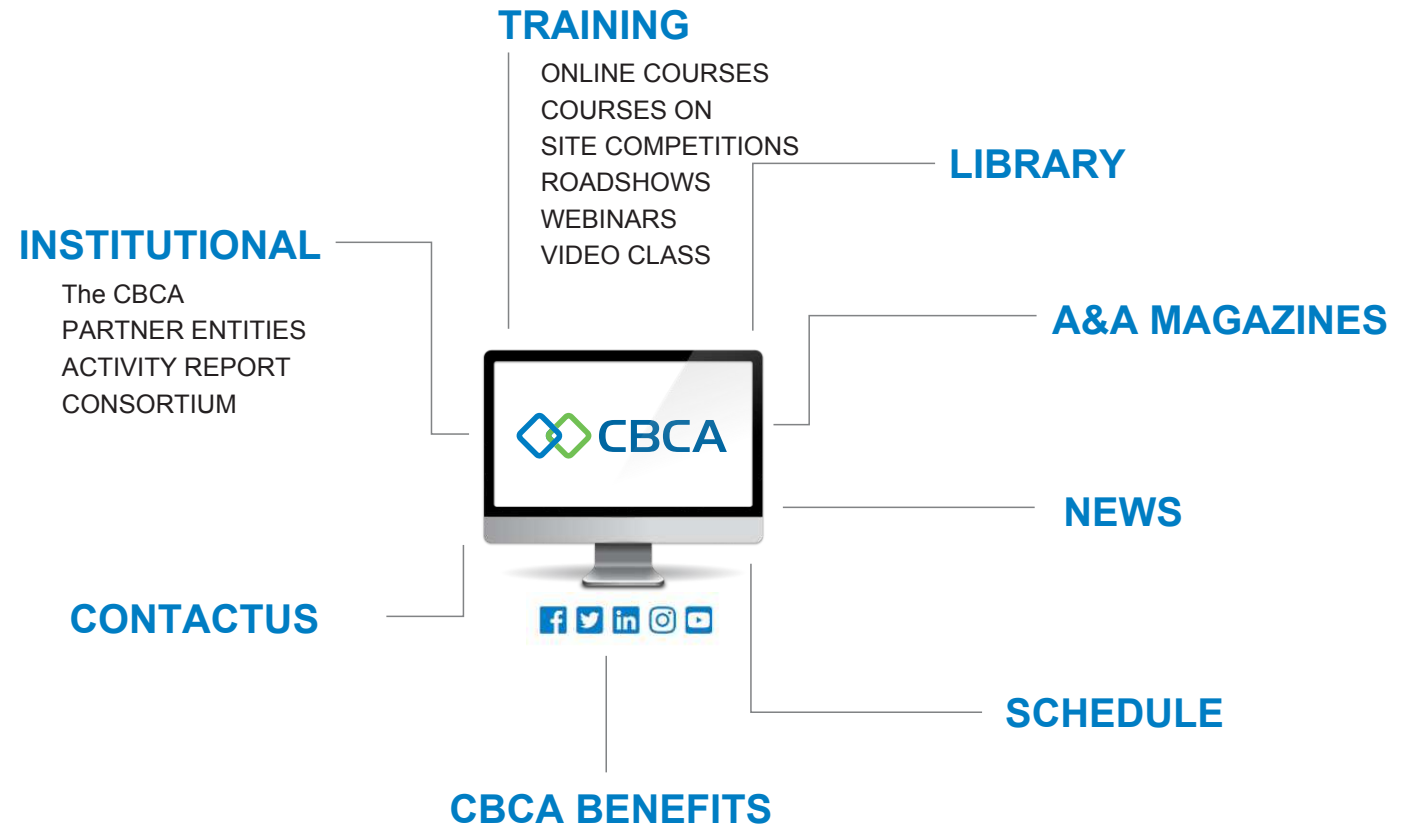
Record: 26,430 (NOV)

223,678
2018

Record: 28,725 (MAR)

286,709
2017

Record: 31,462 (MAR)



PROMOTION & DISSEMINATION

WORKS BANK

2,702
NEW USERS

3,692
VISITS

101
NEW WORKS REGISTERED

14,388
PROFESSIONALS
(ARCHITECTS AND ENGINEERS)

38,960
PAGE VIEWS

04:14s
AVERAGE SESSION DURATION



Integration with the Brazil
Steel Construction Guide
through link to suppliers
registered in the works.

Steel construction is increasingly present in Brazil.

To catalog and assemble steel works in Brazil, the CBCA created the Works Bank - an indexing system of works by typologies, use categories, designers, and structure manufacturers.

The Works Bank aims to highlight the production chain of steel construction in addition to serving as a bank of ideas and construction processes.

- > Building typology
- > Category of use
- > Architecture
- > Structural engineering
- > Structure manufacturer

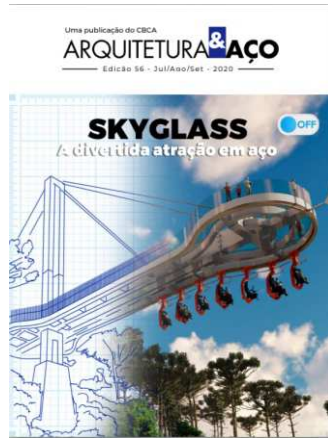
Works Bank is available on a responsive website for Smartphone and Tablet (IOS and Android)

PROMOTION & DISSEMINATION

REVISTA ARQUITETURA & AÇO PUBLICATIONS



ISSUE No. 57



ISSUE No. 56



ISSUE No. 55

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

2020: 4,126
2019: 11,529
2018: 12,887
2017: 26,378
2016: 21,128

26,722

VISITS TO THE MAGAZINE PAGE

1,540

MAGAZINE DOWNLOADS

5,625

VIEWS OF ARTICLES AND
TECHICAL NOTES

130,977

SITE NEWS: VIEWS

PROMOTION & DISSEMINATION

ORIENTATIVE GUIDE TO STEEL CONSTRUCTION

Launched in September/19, the application aims to guide investors, builders, architects, engineers, manufacturers, assemblers and end customers for good practices in relation to steel construction, with minimum criteria recommended for the stages from conception to execution of designs, manufacture, transport and assembly of its structures and interfaces.

Through an interactive, self-instructive checklist, the professional can access each of the available tabs (Management, Architecture, Structure, Manufacturing, Logistics and Assembly, and Passive Protection) in order to know which direction to take so that his design is executed at a level of excellence.

The practices recommended in the Guide are for guidance, and it is up to those responsible to define which apply to the specific situations of each project.



01:32s

AVERAGE TIME ON PAGE

4,198

PAGE VIEWS

ANDROID

625

TOTAL INSTALLATIONS CARRIED OUT

IOS

134

TOTAL INSTALLATIONS CARRIED OUT

759

INSTALLATIONS ON ACTIVE DEVICES

PROMOTION & DISSEMINATION

MEDIA

CBCA NEWS

Created in 2010, and published weekly.



As principais **Notícias** do
Mercado da Construção em Aço

19 DE NOVEMBRO DE 2020



Construção metálica
viabiliza um novo prédio
dentro de outro no
Instituto Butantan

> Conheça!



WEBINARS CBCA

18,418
VIEWS

215
INDICATIONS
OF CONTENT

PRESS

61 contents published mentioning the CBCA in newspapers, magazines and websites.

19 releases, notes and agenda suggestions released to the press.

Articles published in several communication vehicles, with emphasis on Valor Econômico, Revista Casa e Jardim, Zero Hora, Diário do Grande ABC, Estado de Minas, Folha de Pernambuco, Diário de Goiás, Gazeta do Povo and ArchDaily website.



PROMOTION & DISSEMINATION

SOCIAL MEDIA

+ 51% FOLLOWERS ON FACEBOOK

+ 48% FOLLOWERS ON LINKEDIN

+ 21% FOLLOWERS ON INSTAGRAM

+ 10% FOLLOWERS ON TWITTER



31,980
VIEWS

18,239,348
TOTAL IMPRESSIONS

1,067,840
TOTAL INTERACTIONS

571
TOTAL PUBLICATIONS

MAIN PUBLICATIONS



1,832 ENGAGEMENTS
701,654 PEOPLE REACHED



17 LIKES
7 COMMENTS



Designed by Telles Arquitetura, this contemporary-looking residence is located on a plot of land with beautiful vegetation in the background in an area of environmental preservation in the municipality of Campinas. Due to the slope in the land, the house was built in levels and two metallic modules were used to compose...

187 LIKES

PROMOTION & DISSEMINATION

PROMOTIONAL VIDEOS



38,612
VIEWS

- Transformadores da Construção - 2a Temporada
CBCA - 1 / 5
- Transformadores da Construção - Módulos de Alimentação e Serviços d...
CBCA
- 2 Transformadores da Construção - Colégio Pueri Domus Perdizes
CBCA
- 3 Transformadores da Construção - Hospital Municipal M'Boi Mirim
CBCA
- 4 Transformadores da Construção - Instituto Orizonti
CBCA
- 5 Transformadores da Construção - Casa de Aço
CBCA



PROMOTION & DISSEMINATION

WEBINARS

WEBINARS ON CBCA'S FACEBOOK PAGE TO REPLACE ROADSHOWS THAT WOULD BE HELD IN 2020



6,300
VIEWERS

PROMOTION & DISSEMINATION

COMPETITION FOR ARCHITECTURE STUDENTS

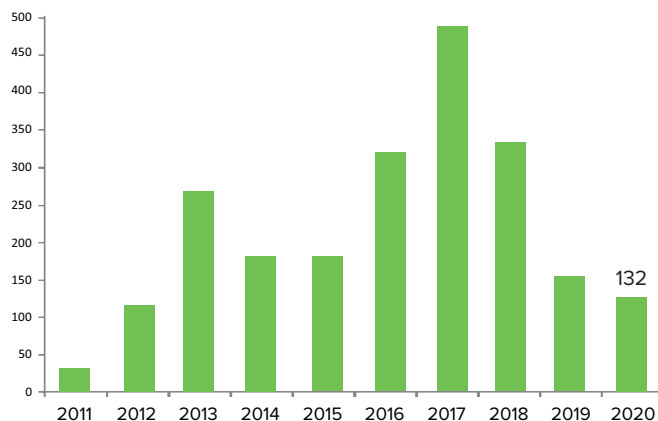
Theme: Solution for Sustainable Cities and Communities

The Competition aims to stimulate the creative work of architecture students in projects with steel structures.

In 2020, 132 teams were registered representing 18 Brazilian states and 88 Schools of Architecture. Of the works received, there was an evaluation among the 62 projects that were delivered, among which 40 were selected for the final evaluation.

The winning team of the CBCA Competition represented the country in the ALACERO Competition, ranking 1st in this Competition.

EVOLUTION OF PARTICIPATION



Vencedores

1st Place

School of Architecture and Urbanism of the Universidade de São Paulo

2nd Place

School of Architecture and Urbanism; Pontifícia Universidade Católica de Campinas

3rd place

School of Architecture and Urbanism of the Universidade de São Paulo

Honorable Mention I

Universidade Presbiteriana Mackenzie

Honorable Mention II

Universidade Federal de Pernambuco

Honorable Mention III

Universidade Tecnológica Federal do Paraná



Teams winning the 2020 edition.

27,181

VISITS IN THE YEAR

76,241

VIEWS

132

REGISTERED TEAMS

(2008-2020)

PROMOTION & DISSEMINATION

COMPETITION FOR ARCHITECTURE STUDENTS - ALACERO

Theme: Solution for Sustainable Cities and Communities

Team from Brazil wins 1st place in the 13th Alacero Competition for Architecture Students

After winning the 13th Competition for Architecture Students at the Brazilian Center for Steel Construction (CBCA), a team from the School of Architecture and Urbanism at the Universidade de São Paulo won first place in the 13th Alacero Competition for Architecture Students, promoted by the Associação Latino-Americana do Aço (Alacero).

Second place went to the team from the Universidade de Córdoba, in Argentina, and third place to the students from the Universidad del Valle - School of architecture, of Colombia. Teams from the Dominican Republic, Mexico, Ecuador and Chile also participated.

Since 2008, CBCA and Alacero have been partners in carrying out the Competition for Architecture Students, with CBCA being responsible for carrying out the national stage of the Competition, being considered today one of the most important for architecture students in Brazil.



62
TEAMS

43
UNIVERSITIES

197
STUDENTS

PROMOTION & DISSEMINATION

COMPETITION FOR ENGINEERING STUDENTS

Theme: Second Bridge between Brazil and Paraguay

The Judging Committee meeting for judging the works related to the 2nd CBCA Competition for Engineering Students-2020 was held remotely on September 2, 2020.

In all, 16 projects were received and analyzed.

The first comments of the jury were related to the technical quality of the works received, considering the training stage of the students participating in the 2nd CBCA Competition for Engineering Students - 2020.

11,766
VISITS IN THE YEAR

41
REGISTERED TEAMS

23,407
VIEWS

01:57s
AVERAGE SESSION
DURATION



Winners

1st Place

Universidade Federal dos Vales do
Jequitinhonha e Mucuri – UFVJM –
Teófilo Otoni/MG

2nd Place

Universidade Federal do Rio de Janeiro –
UFRJ – Rio de Janeiro/RJ

3rd place

Instituto Mauá de Tecnologia – São Paulo/SP

Honorable Mention I

Universidade Federal de Lavras – Lavras/MG

Honorable Mention II

Universidade Estadual de Londrina – Londrina/PR



PROMOTION & DISSEMINATION

EVENTS & LECTURES

SPONSORED / SUPPORTED

National Engineering Congress - Grupo Afya (Afya Group) - Steel Construction Systems: Design, Industrialization and Assembly - 82 people

Academic Circuit - UNIBH - Use of steel in infrastructure works: Airports - 133 people

Virtual Lecture PUC-RJ - Steel Construction: feasible, accessible and sustainable - 123 people

UIA Digital 2020 - IAB-RJ - 500 people

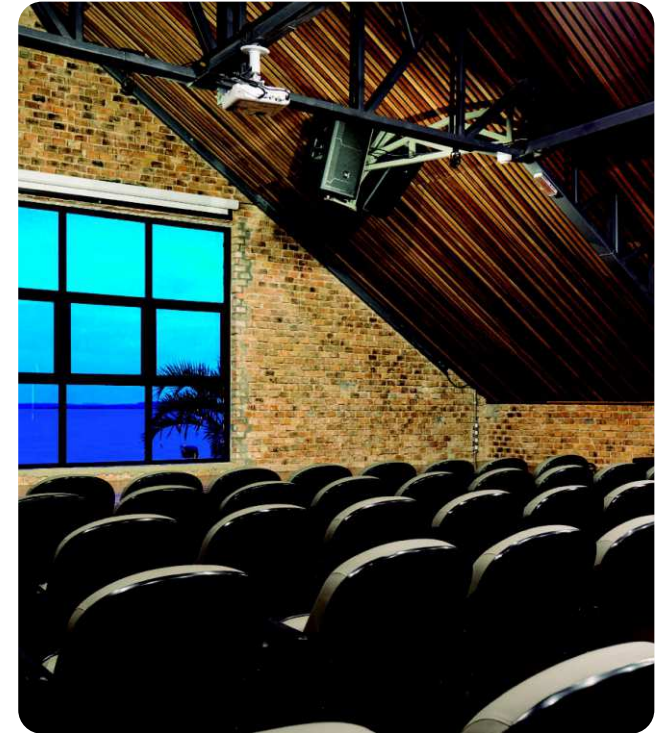
ENECE - National Meeting of Engineering and Structural Consulting - ABECE – 1500 people

22nd Integrated Week of CEATEC - PUC-Campinas - Steel Structures - Design, Specification and Protection against Corrosion - 104 people

X Civil Engineering Week - UFC - Hybrid and Mixed Steel and Concrete Solutions for Multi-storey Buildings - 42 people

2,484
PARTICIPANTS

ALL EVENTS
WERE ONLINE.





PARTNERSHIPS

EXCHANGE WITH SIMILAR ORGANIZATIONS



worldsteel Association

- Joint actions to promote steel construction.



AISC – American Institute of Steel Construction

- Participation as an associate.



ALACERO – Asociación Latinoamericana del Acero

- Likewise, as technical Secretary, in the development of actions by CODUA (Comité de Desarrollo del Uso del Acero).
- Coordination of Brazilian participation in the 11th ALACERO Steel Design Competition for Architecture Students 2018.

PARCERIAS

NATIONAL ENTITIES & UNIVERSITIES

NATIONAL ENTITIES

AARS – Associação do Aço do Rio Grande do Sul

ABCEM - Associação Brasileira da Construção Metálica

ABECE - Associação Brasileira de Engenharia e Consultoria Estrutural

ABM – Associação Brasileira de Metalurgia, Materiais e Mineração

ABNT – Associação Brasileira de Normas Técnicas

ABRAMAT - Associação Brasileira da Indústria Materiais de Construção

ASBEA - Associação Brasileira dos Escritórios de Arquitetura

ASSOCIAÇÃO DRYWALL - Associação Brasileira do Drywall

DNIT - Departamento Nacional de Infraestrutura de Transportes

IAB-RJ - Instituto de Arquitetos do Brasil - RJ

ICZ - Instituto de Metais não Ferrosos

INDA – Instituto Nacional dos Distribuidores de Aço

UNIVERSITIES

IMT - Instituto Mauá de Tecnologia

Mackenzie - Universidade Presbiteriana Mackenzie

PUC-Campinas – Pontifícia Universidade Católica de Campinas

PUC-Rio - Pontifícia Universidade Católica do Rio de Janeiro

UEL - Universidade Estadual de Londrina

UFC - Universidade Federal do Ceará

UFLA - Universidade Federal de Lavras

UFPE - Universidade Federal de Pernambuco

UFRJ - Universidade Federal do Rio de Janeiro

UFVJM - Universidade Federal dos Vales do Jequitinhonha e Mucuri

UnIBH - Centro Universitário de Belo Horizonte

UNINOVAFAPI - Centro Universitário UNINOVAFAPI

USP - Universidade de São Paulo

UTFPR - Universidade Tecnológica Federal do Paraná



QUALITY PROMOTION AND STANDARDIZATION

CE-02:125.004 – Commission for the Study of Construction Systems Light Steel Framing First part concluded with ABNT. Second part has already been sent to ABNT for evaluation. Third part under discussion (draft).

CE-24:103.006 – Commission for Studies on the Reaction to Fire of Materials Material sent to ABNT.

ABNT NBR 8800:2008 (revision)

Request for ABNT to open a study commission.

ABNT NBR 14513 – Wavy section coated steel tiles and ABNT NBR 14514 - Trapezoidal section coated steel tiles
Under review.

CE-028:001.004 – Commission for the Study of Welded and Cold Formed Profiles
Under Review

ABNT NBR 15980 – Laminated steel profiles for structural use - Dimensions and tolerances (revision)
Under Review

TECHNICAL STANDARDS





DEVELOPMENT OF TECHNICAL MATERIAL

The Magazine supported by CBCA opens space for professionals to exhibit their scientific articles or technical notes on topics related to steel structures and mixed steel-concrete structures.

The publication, which is scientific in nature, has an active and independent editorial board in the evaluation of articles, had its 9th volume published, containing three issues, with a total of 20 articles, always with the participation of researchers from Brazil and Portugal. All articles receive the DOI (*).

(*) DOI stands for Digital Object Identifier. It is a standard for identifying documents on digital networks.

REVISTA DA ESTRUTURA DE AÇO - REA



6,348
ACCESSES

Devices: 4,197
Desktop: 3,424
Mobile: 750
Tablet: 23

14,546
VIEWS

4,123
NEW USERS

DEVELOPMENT OF TECHNICAL MATERIAL

BRAZIL STEEL CONSTRUCTION GUIDE

The Brazil Steel Construction Guide is a pioneering initiative by the Brazilian Steel Construction Center - CBCA, with support from the Associação Brasileira da Construção Metálica - ABCEM, aiming at the growth of the sector. It maps and disseminates the production chain that participates in steel construction, facilitating consumers' access to the different products, services and solutions available on the market.

The Guide is continuously updated to broaden its scope and coverage, incorporating new segments of steel construction and new participants.

19,947
ACCESSES

2,899
DOWNLOADS

40,306
VIEWS

1,221
PARTICIPATING
COMPANIES

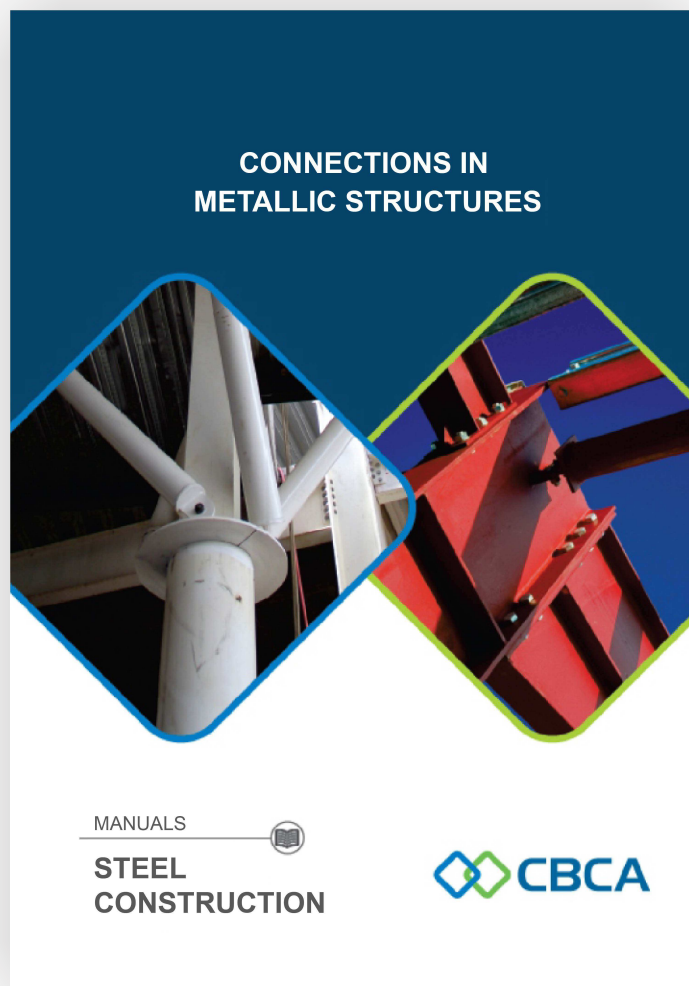
16,996
NEW USERS

11
NEW REGISTRATIONS

The Guide is available on a responsive website for Smartphone and Tablet (IOS and Android).



DEVELOPMENT OF TECHNICAL MATERIAL



STEEL CONSTRUCTION MANUALS

35,739
MANUAL DOWNLOADS

2,632
DOWNLOADS OF THE
MANUAL LIGAÇÕES EM
ESTRUTURAS METÁLICAS
(CONNECTIONS IN METALLIC
STRUCTURES) (RECORD)

140,291
ACCESS TO MANUALS

Editions Scheduled for 2021:

- *Bridges and Viaducts in Mixed Beams (update)*
- *Easy Code Manual (new)*
- *Fire Resistance Manual (update)*
- *Modular Construction Manual (new)*
- *Façades Manual (new)*



LABOR QUALIFICATION

VIDEO CLASSES

CHARACTERISTICS OF STEEL CONSTRUCTION

ECONOMIC FEASIBILITY OF STEEL STRUCTURES

TYPES OF PROFILES

CONNECTIONS

TRANSPORT AND ASSEMBLY OF STEEL

STRUCTURES FIRE SAFETY IN BUILDINGS

PROTECTION AGAINST CORROSION

STRUCTURAL STEELS

STRUCTURAL CONCEPTION

EXTERNAL SEALS AND SLABS



HIGHEST NUMBER OF
DOWNLOADS

**CHARACTERISTICS
OF STEEL
CONSTRUCTION**

866
DOWNLOADS

9,483
ACCESSES

8,219
PAGE VIEWS

4,789
DOWNLOADS

QUALIFICAÇÃO DE MÃO DE OBRA

COURSE PROMOTION

ON SITE COURSE #FIQUEEMCASA

- Light Steel Framing Design and Calculation (March - 17 students)
- Multi-storey Steel Buildings (March - 16 students)
- Mixed Structures- Beams, Slabs and Pillars (August - 16 students)
- Dimensioning of Connections - NBR 8800 (September - 28 students)
- Industrial Steel Warehouses (October - 28 students)
- Structural Stability (October - 23 students)
- Design and Assembly of Metallic Bridges (November - 17 students)
- Manufacturing, Transport and Assembly (November - 19 students)
- Structural Stability (December - 23 students)

ONLINE COURSE

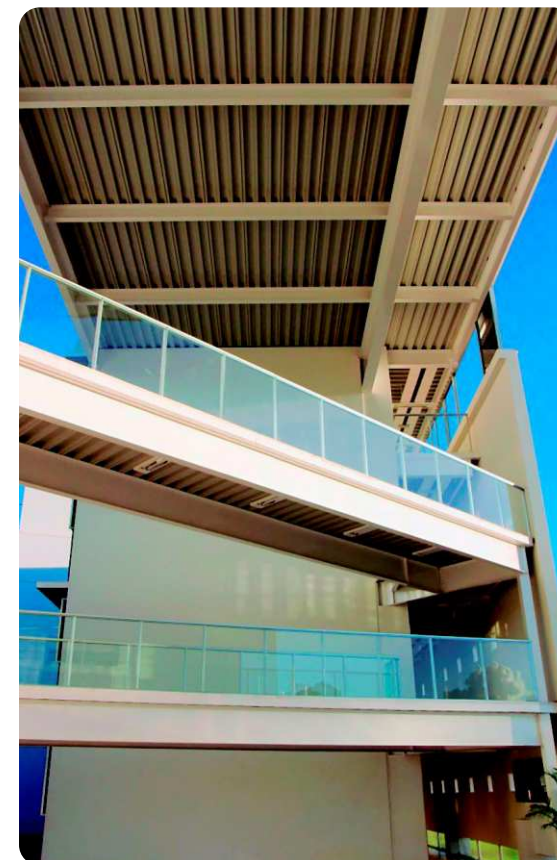
INTRODUCTION TO STEEL CONSTRUCTION

EXECUTION OF STEEL STRUCTURES

STRUCTURAL STEEL SYSTEMS

LIGHT STEEL FRAMING (NEW)

177
STUDENTS COMPLETE
ONLINE COURSES







ACTIVITIES REPORT 2020

MANAGER:



www.cbca-acobrasil.org.br