CBCA

Brazilian Center for Steel Construction

2024 ACTIVITIES REPORT

CBCA

MANAGER:

BRAZIL
STEEL INSTITUTE

MESSAGE FROM THE **EXECUTIVE DIRECTOR**

DRIVING STEEL CONSTRUCTION IN BRAZIL

In 2024, the Brazilian Center for Steel Construction (CBCA) consolidated its mission to promote and expand the industrialized steel construction market in Brazil. Our strategic actions, focused on training professionals and students, strengthening the industry and disseminating knowledge, have been key in driving the technological development of steel construction in the country.

Over the past year, we maintained our main initiatives and made significant progress with new projects, such as the Steel Construction Hackathon and the Professor Training Course, both of which began in 2023 and which once again had significant results. The Training Course, for example, was held in Brasília, with the participation of 20 universities from the Mid-West, reinforcing the training of future professionals with expertise in metal construction.

As for the Hackathon, which had already been a success in its first edition, expanded its reach in 2024, involving around 1,800 students from Rede Anima Brasil and Universidade Newton Paiva - Minas Gerais, with the support of the City Hall of Belo Horizonte. The topics “Bus Stop in Metal Structure” and “MOVE Urban Stations” brought innovative challenges, connecting young talents to the world of industrialized steel construction.

Our RoadShows, held in Curitiba, Recife, Brasília and Vitória, addressed composite steel and concrete structures, attracting more than 500 participants and strengthening partnerships with local entities and universities. These events have been key in promoting the best practices and demonstrating, in practice, the benefits of using steel in construction.

CBCA’s annual surveys with manufacturers of steel structures, steel tiles and steel decks, and galvanized profiles for light steel frames and drywall, as well as steel silos, reinforced the growth opportunities in the industry. The results show that there is a promising market for metal construction in Brazil, requiring greater efforts to expand its stake in structural projects.

MORE EFFORTS TO EXPAND THE STEEL CONSTRUCTION MARKET IN BRAZIL

We know that steel construction still has plenty of room to grow. To achieve this, it is essential to intensify efforts to show the market that the industrialization of construction is the way forward. The competitive advantages of metal structures are clear:

- Reduction in construction time;
- Less waste and greater control of residues;
- Greater safety and comfort for workers;
- Greater predictability and efficiency in project management;

Therefore, 2025 will be a strategic year to strengthen the presence of steel in Brazilian civil construction. CBCA will continue to work more decisively to expand its operations in the public and private sectors, so that industrialized steel construction receives the recognition and participation it deserves in the domestic market.

Our work in the academic environment has also advanced, with more interactive online courses, training more than 200 students in 2024 and promoting the dissemination of the best practices. In addition, the Competitions for Engineering and Architecture Students, held with the support of ABECE and Alacero, continue to be a great hit, providing actual learning opportunities for the new generations.

The promotion of steel construction also played a key role, with strong work on social media and in the press. In 2024, we had 300 articles published in the media, more than 310 thousand visits to the CBCA website and 90 thousand visits to online magazine “Revista Arquitetura & Aço”. This constant presence reinforces our commitment to making steel an increasingly recognized and adopted solution in civil construction.

COMMITMENT TO THE EXPANSION OF THE INDUSTRY IN 2025

CBCA will continue to act in an even more strategic way in 2025, in partnership with companies, entities and professionals in the industry, to consolidate and expand the participation of steel in the national civil construction. The future of construction is industrialized, and steel has a key role in this transformation.

We need to move forward together to build a more efficient, sustainable and innovative Brazil.

Let’s strengthen our performance and take steel construction to the leading role it deserves!

Cesar O. R. Peres

Executive Director

TO PROMOTE AND EXPAND THE PARTICIPATION OF **STEEL CONSTRUCTION** IN THE DOMESTIC MARKET, PERFORMING **ACTIONS FOR ITS DISSEMINATION AND** SUPPORTING ITS **TECHNOLOGICAL DEVELOPMENT**.

SUMMARY

CONSORTIUM MEMBERS

MANAGERS

ArcelorMittal Tubarão

Gerdau Açominas S.A

Usiminas

COLLABORATORS

Aperam

ArcelorMittal Aços Longos

ArcelorMittal Sul Fluminense

Gerdau Aços Longos S.A.

Vallourec Tubos do Brasil S.A.

COMPANIES

ALS Comercio e Industria de Ferro e Aço Ltda.

Blat Estruturas Metálicas

Barbieri do Brasil Ind. E Com.

Center Steel Eng. Light Steel Framing

CEP - Engenharia Pré Fabricada

Comercial Gerdau

FISCHER

Grupo Pizzinatto

ISOESTE Construtivos Isotérmicos

Perfinaço

Soluções Usiminas

STEEL F DESIGN

Tuper

Novas empresas
New Companies

MANAGEMENT

Executive Director

Cesar O. R. Peres

Management Committee

ArcelorMittal Tubarão	Eduardo Fares Zanotti
Gerdau	Cesar O. R. Peres
Usiminas	Miguel Homes
Aço Brasil / CBCA	Alberto Cotrim

Executive Management

Superintendent	Alberto Cotrim
Executive Manager	Rafael Silva
Marketing & Training Coordinator	Ricardo Werneck
Technical Advisor	Isadora Arêas

Executive Commission

ArcelorMittal Tubarão	Alexandre Gama / Rogerio Barbosa / Erika Ribeiro
Gerdau	Rosane Beviláqua / Marcos Pereira
Usiminas	Humberto Bellei / Carlos Carvalhido
CBCA	Rafael Silva

HIGHLIGHTS

CBCA Manual
Vertical Sealings
& Facades

ABNT Standard
NBR: 8800

Steel Structure
Sizing Course

STATISTICAL DATA

Steel structure production in 2023 generated revenue of 17.2 billion Brazilian Reais*, a growth of around 6% compared to the previous year, reveals a CBCA survey*

With 1.07 million tons of steel structures produced, an increase of 2.4% compared to 2022, companies in the industrialized steel construction industry point to an optimistic scenario for the coming years.

The "Scenario for the Steel Structure Manufacturers" survey considers data on metal structures, power transmission towers, wind energy towers, structures for solar energy parks and metal defenses. The 370 companies participating in the scenario surveyed produced, in 2023, 1.07 million tons of steel structures, an increase of 2.4% compared to 2022, with 659 thousand tons in production of metal structure works, 337 thousand tons in production for works in the energy segment and 39.2 thousand tons in production of metal defenses. The addition of 21 companies for the 2024 survey should also be emphasized.

Such an amount led to a 6.2% growth in companies' revenue: the survey shows a revenue of 17.2 billion Brazilian *Reais* in 2023 compared to 16.2 billion in 2022, 14.3 billion in 2021, 10.4 billion in 2020 and 7.1 billion in 2019. The data show that, in the last 5 years, companies' revenue has almost tripled.

Regarding the production capacity of steel structure manufacturers, 2.34 million tons was the number raised for the 2023 base year, 1.7% higher than the immediately previous year, with a use rate of 46%, the same as in 2022, indicating that the sector is capable of meeting a demand equivalent to twice the current production volume.

CBCA also performed the **"Scenario of Steel Tile and Steel Deck Manufacturers"** survey. The study analyzed 105 companies, with 83.8% of them operating exclusively in producing steel tiles and 13.3% producing steel tiles and steel deck. A 2.5% growth in the companies' revenue was recorded compared to 2022, which corresponds to approximately 8.2 billion Brazilian *Reais*, and also the production of 502.9 thousand tons of steel tiles and steel deck in 2023, with a production capacity of 1.2 million tons during the same year.

The **"Scenario of Manufacturers of Galvanized Profiles - Light Steel Frame & Drywall"** study, in turn, showed a growth of 27.7% (Light Steel Frame) and 5.9% (Drywall) in production compared to 2022, with optimistic expectations for the coming years. The 36 participating companies had a revenue of 1.6 Brazilian *Reais*, a 18.7% growth compared to the previous year. A total of 107.6 thousand tons of galvanized profiles were produced in the 2023 base year, with a considerable increase in production in both LSF and drywall, with 273.5 thousand tons in production capacity.

DIFFICULTIES & OPTIMISM

In the **"Scenario of Steel Structure Manufacturers"** survey it was reported that, for 54% of respondents, the main factor affecting the growth of companies is the high taxation affecting the industry of industrialized construction, as occurred in the previous edition of the survey. Approximately 78% of manufacturers are optimistic for 2024, predicting growth compared to 2023.

The **"Scenario of Steel Tile and Steel Deck Manufacturers"** survey found that competition with imported and/or unqualified material was the main external difficulty for the companies, mentioned by 50% of respondents. In 2024, approximately 76% of tile manufacturers are optimistic, predicting market growth compared to 2023.

The **"Scenario of Manufacturers of Galvanized Profiles - Light Steel Frame & Drywall"** survey showed that, for approximately 40% of galvanized profile manufacturers, competition with imported and/or unqualified material is also the primary external difficulty they face.

In view of this scenario, despite the difficulties, it is also important to emphasize that, in all surveys, more than half of manufacturers were optimistic, believing in market growth to be reflected in the 2025 studies, looking back to 2024.

Every year, surveys have been improved in terms of methodology, data collection and search for new manufacturers. It is a continuous process of improvement, aimed at presenting a better vision of the industry and consequently helping to steer actions for better development of the steel construction industry.

The surveys serve as a support for promoting industrialized steel construction with society, the government and the civil construction market, exposing the actual importance and dimension of steel construction.

A study on the steel silo market was also published, available along with all others on the CBCA website.

STATISTICAL DATA

SURVEYS

SCENARIO OF STEEL STRUCTURE MANUFACTURERS

In 2023, steel structure manufacturing companies produced approximately 1.07 million tons, generating revenue of BRL 17.2 billion.

Compared to 2022, the industry had a small growth, with a 2.4% increase in production. The metal structures segment, consisting of companies that produce structures for bridges and overpasses, rooftops, as well as commercial, residential and industrial works, registered a significant growth of 26.2% compared to the previous year. It should also be emphasized that there was a greater number of manufacturers surveyed in this segment.

The energy industry, in turn, faced a 23.2% drop in the market, driven mainly by the low demand for wind power generation works.

The transmission industry also showed a drop, equivalent to 7.1% in 2023.

Plants continue to be the main purchasing channel, responsible for 74.9% of the supply of raw materials.

More than 30% of manufacturers have some type of certification, with 88.5% of them having ISO 9001 certification.

In the view of companies, the tax burden on structures (54.7%) and the low quality of labor (39.2%) are the main factors that hindered growth. Despite these challenges, manufacturers are optimistic for 2024, with around 78% believing in growth compared to 2023.

The survey is continually improved, whether in methodology, data collection or in the search for new manufacturers, aiming to offer a clearer vision of the industry and help steer actions for the development of civil construction.

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

In 2023, the companies that participate in the Light Steel Frame & Drywall profiles industry together produced 107.6 thousand tons, resulting in a revenue of BRL 1.64 billion Brazilian *Reais*.

This was a year in which the market for LSF profiles grew by 27.7%. For Drywall profiles, there was an increase of 5.9% compared to the previous year.

The production capacity of LSF profiles increased by 7.9%, registering 86.8 thousand tons. For Drywall, the increase corresponded to 2.5%, registering 186.7 thousand tons.

Competition from imported or unqualified materials, along with the cost of raw materials, were the main factors that hindered the growth of companies in 2023.

Regarding 2024, there is optimism in the market and 81.8% of manufacturers believe there will be growth in relation to 2023.

Every year, surveys have been improving, whether in methodology, data collection or in the search for new manufacturers. It is a permanent process of improvement, so that the results help direct actions for better development of this segment.

STATISTICAL DATA

SURVEYS

SCENARIO OF STEEL TILE & STEEL DECK MANUFACTURERS

In 2023, manufacturers of steel tiles, enclosure panels and steel decks produced a total of 502.9 thousand tons, generating BRL 8.2 billion in revenue.

The industry showed slight growth in relation to 2022, with the production of steel tiles and panels increasing by 1.2%, while steel deck remained practically stable.

Production capacity remained at 1.2 million tons in 2023, with a small increase of 1.7% compared to the previous year.

In 2023, machinery operated at 41% of its potential, indicating the capacity to absorb an increase in demand.

Plants are the main purchasing channel, accounting for 44.3% of the supply of raw materials, while 42.2% of materials are imported.

In 2023, competition with imported and/or unqualified materials was the main obstacle to companies' growth, mentioned by half of participants.

For 2024, manufacturers of tiles and panels are optimistic, with 76.2% predicting market growth. Among steel deck producers, 70.6% also expect an increase this year.

Every year, the survey goes through an improvement process, always seeking to provide a clearer vision and contribute to the development of the industry.

SCENARIO OF STEEL SILO MANUFACTURERS

In 2023, the participating companies that manufacture Steel Silos together produced 184.3 thousand tons and had revenues of BRL 4.8 billion.

Production capacity was 324.5 thousand tons in 2022, with a machinery usage rate of 56.8%.

The plant is the main purchasing channel and 79.6% of the raw material is purchased using such channel. Imports, in turn, are quite significant and 15.9% of the material comes from abroad.

Regarding the market, manufacturers consider that, in 2023, the cost of raw materials and the financial crisis stood out as the main factors that hindered growth.

For this year, Steel Silo manufacturers are optimistic and 75.0% believe that the market will grow in relation to 2023.

This is the second edition of the study, which undergoes an improvement process every year, whether in methodology, data collection and/or in the search for new manufacturers.

It is a permanent process of improvement, so that the results help direct actions for better development of this segment.

437
DOWNLOADS

PROMOTION & DISCLOSURE

PROMOTION & DISCLOSURE

CBCA WEBSITE

217,494
VISITS / YEAR
DESKTOP: *73.0%*
MOBILE: *26.2%*
TABLET: *0.8%*

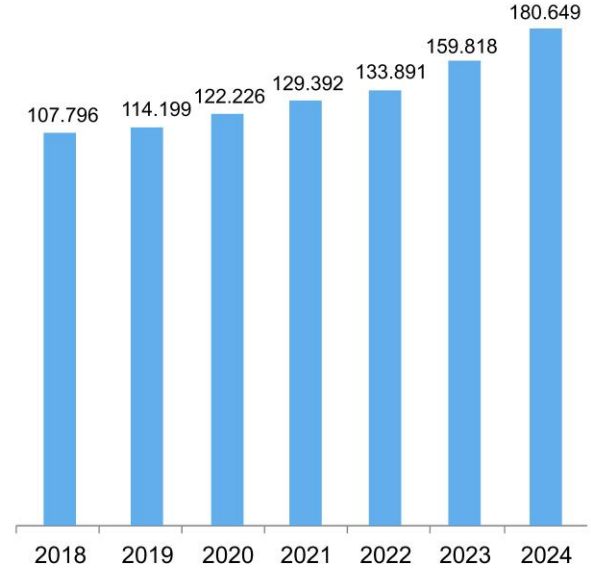
20,831
NEW
REGISTERED USERS

57.3%
ENGAGEMENT
RATE

20,831
NEW VISITORS
(*) Website measurement is based on Google Analytics

29,140
TOTAL
PAGE VIEWS
Average session duration: 0:55s

REGISTRATIONS ON THE WEBSITE



ENGLISH WEBSITE NUMBERS

New users: 248
Page views: 283
Average session duration: 0:23s

LANGUAGES

PT-BR: 92.92%
EN-US: 1.77%
PT-PT: 0.83%
OTHERS: 4.48%

PROMOTION & DISCLOSURE

WEBSITE VISITS I SITE MAP

217,494
2024
Record: 21,448 (OCT)
762 / day

311,641
2023
Record: 25,970 (MAY)
865.7 / day

301,458
2022
Record: 32,900 (APR)
1,096.7 / day

277,367
2021
Record: 32,900 (APR)
1,096.7 / day

- **TRAINING**
  - ONLINE COURSES
  - LIVE COURSES
  - TRAINING COURSE
  - COMPETITIONS
  - ROADSHOWS
  - WEBINARS
  - VIDEO LESSON
  - HACKATHON
  - SCHOLARSHIP
- **INSTITUTIONAL**
  - CBCA
  - PARTNER ENTITIES
  - ACTIVITIES REPORT
  - CONSORTIUM MEMBERS
- **LIBRARY**
- **A&A MAGAZINES**
- **NEWS**
- **AGENDA**
- **CBCA BENEFITS**
- **CONTACT US**

PROMOTION & DISCLOSURE

WORKS DATABASE

980
NEW USERS

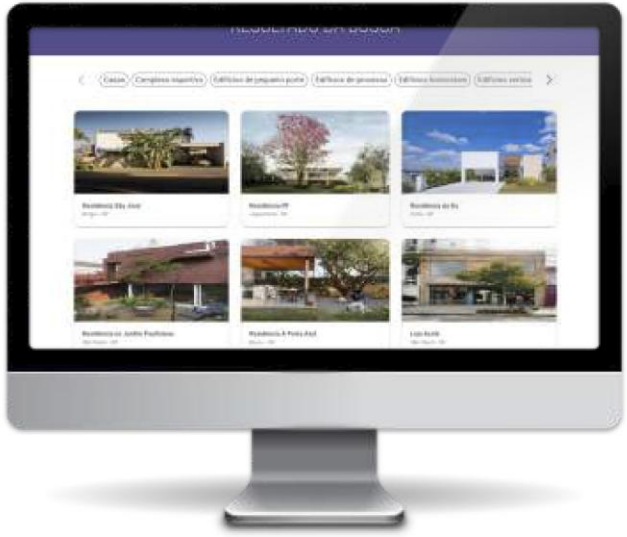
29,372
VISITS

244
NEW WORKS REGISTERED

15,063
PROFESSIONALS
(ARCHITECTS & ENGINEERS)

10,881
PAGE VIEWS

01:59s
AVERAGE SESSION DURATION



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

Steel construction is increasingly present in Brazil.

To catalog and gather steel works in Brazil, CBCA created the Works Database - a system for indexing works by typologies, usage categories, designers and manufacturers of structures.

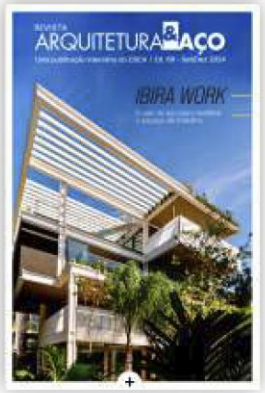
The purpose of the Works Database is to evidence the steel construction production chain, and also to serve as a database of ideas and construction processes.

> Building typology
> Usage category
> Architecture
> Structural engineering
> Manufacturer of structures

The Works Database is available on a responsive website for Smartphones and Tablets (IOS & Android)

PROMOTION & DISCLOSURE

"ARQUITETURA & AÇO" MAGAZINE PUBLICATIONS



ISSUE No. 69

ISSUE No. 68

ISSUE No. 67

95,076
TOTAL USERS

19,022
NEW USERS

1,218
MAY – MONTH WITH THE HIGHEST NUMBER OF VISITORS

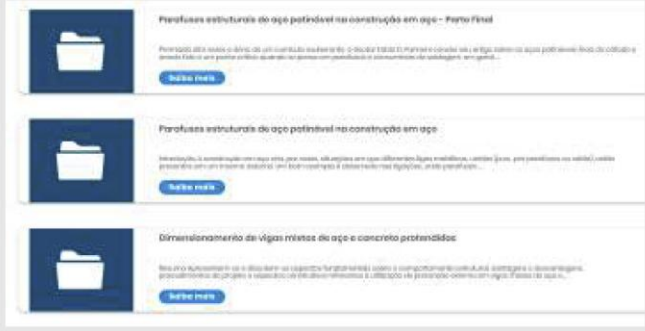
1,102,268
IMPRESSIONS

23,821
VIA GOOGLE ADS

99.41%
CONVERSION RATIO

352

VIEWS OF ARTICLES AND TECHNICAL NOTES



ARTICLE WITH THE MOST VIEWS

COLÉGIO BANDEIRANTES - ISSUE 67

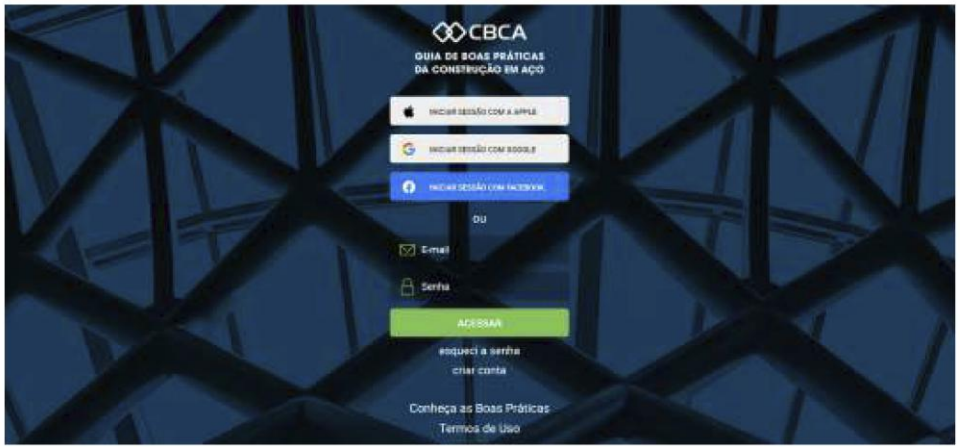
PROMOTION & DISCLOSURE

STEEL CONSTRUCTION GUIDE

Launched in September/19, the purpose of the app is to guide investors, construction companies, architects, engineers, manufacturers, assemblers and end customers on good practices in relation to steel construction, with minimum criteria recommended for the stages from design to project execution, manufacturing, transportation and assembly of its structures and interfaces.

Through an interactive, self-instructional checklist, a professional can visit each of the available tabs (Management, Architecture, Structure, Manufacturing, Logistics and Assembly and Passive Protection), in order to know which direction to follow so that their project is performed at a level of excellence.

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



01:17s
AVERAGE TIME SPENT ON PAGE

1,104
PAGE VIEWS

ANDROID
170
TOTAL INSTALLATIONS MADE

IOS
19
TOTAL INSTALLATIONS MADE

768
INSTALLATIONS IN ACTIVE DEVICES

PROMOTION & DISCLOSURE

MEDIA

CBCA NEWS

Created in 2010, published weekly.

6,684
VIEWS

PRESS

In 2024, 40 stories such as releases, notes and articles were worked on with the press, resulting in the insertion of almost 300 articles in printed newspapers, magazines and portals throughout the country. The advertising equivalence was over BRL 950,000.00. This amount is calculated based on the relevance of the outlet, number of website visits, circulation of the newspaper, content space, among other things. Notable newspapers: Valor Econômico, O Estado de São Paulo, Téchne Magazine and ArchDaily.


Valor Empresas

Fabricantes de produtos de aço para construção ampliam faturamento, mas ociosidade segue elevada


Desafios climáticos estimulam uso de método de construção que reduz desperdícios

Números

Diário do Comércio


Jornal do Comércio

Edifício comercial é revitalizado com sistema construtivo em aço

40
RELEASES

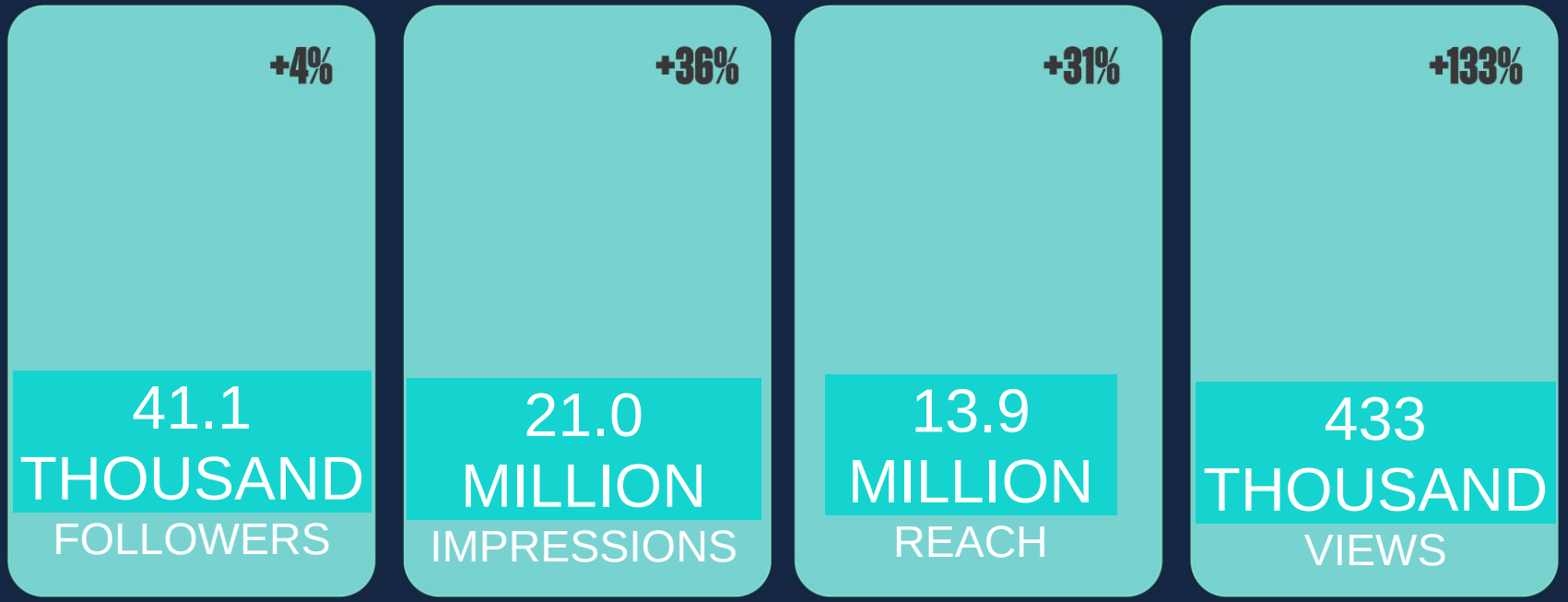
300
ARTICLES PUBLISHED

BLR 950,000.00
ADVERTISING EQUIVALENCE

PROMOTION & DISCLOSURE

SOCIAL MEDIA OUTLETS

BIG NUMBERS



SOCIAL MEDIA OUTLETS

BETTER PERFORMANCE

LINKEDIN

INSTAGRAM

SOCIAL MEDIA OUTLETS

BETTER PERFORMANCE

FACEBOOK

YOUTUBE

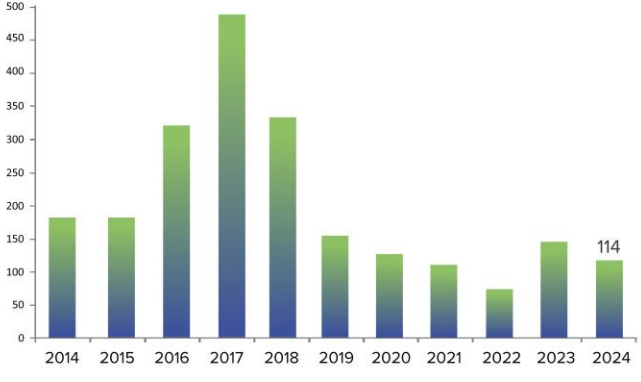
PROMOTION & DISCLOSURE

COMPETITION FOR ARCHITECTURE STUDENTS

Topic: Action Against Global Climate Change

In 2024, 114 teams representing 18 Brazilian states (AL, AM, BA, CE, DF, ES, GO, MG, MT, PB, PE, PR, RJ, RN, RO, RS, SC, SE, SP) and 79 Architecture schools registered. The 56 works received were evaluated, of which 20 were selected for final evaluation.

EVOLUTION IN PARTICIPATION



Winners

1st Place
Centro Universitário de Belas Artes de São Paulo

2nd Place
Universidade Federal de Santa Catarina

3rd Place
Universidade Católica de Santos

Honorable Mention I
Universidade Tecnológica Federal do Paraná

Honorable Mention II
Universidade Federal do Paraná

17 Concurso CBCA/ALACERO para estudantes de ARQUITETURA Estruturas em AÇO 2024

Winning project of the 2023 edition.

21,437
VISITS DURING THE YEAR

7,340
VIEWS

114
REGISTERED TEAMS

1,161
NEW USERS

PROMOTION & DISCLOSURE

COMPETITION FOR ENGINEERING STUDENTS

Topic: Logistics Warehouses made of Steel Structures

The Judging Committee for the 6th CBCA/ABECE Competition for Engineering Students 2024 met remotely on September 19th to discuss and evaluate the projects received.

In total, 75 students participated in the competition, making up 21 teams.

The five best teams from the theoretical phase of the CBCA Competition for Engineering Students participated in the practical phase of the competition in São Paulo, on 10/10, with the support of Kit Mola. During this stage, each team had the opportunity to put into practice their projects developed in the previous phase. In the morning, students assembled the projects and presented them to the judges in the afternoon. After the presentation, the teams were dismissed so that the Judging Committee could evaluate them. The results of the Competition were announced the following day, 10/11, during the National Meeting of Structural Engineering and Consulting (ENECE).

25,229
VISITS DURING THE YEAR

8,292
VIEWS

00:42s
AVERAGE SESSION DURATION

52.7%
ENGAGEMENT RATE

3,117
NEW USERS

Winners

Concurso CBCA/ABECE para Estudantes de 6ª ENGENHARIA 2024

1st Place
Universidade Federal de Lavras

2nd Place
Faculdade Anhembi Morumbi - Vila Olimpia

3rd Place
Universidade Federal do Maranhão

4th Place
Universidade da Grande Dourados - UNIGRAN

5th Place
Universidade Cruzeiro do Sul - São Miguel Paulista Unit

PROMOTION & DISCLOSURE

EVENTS & LECTURES

ORGANIZERS/SPONSORS/SUPPORTERS

Abrainc Summit - Institutional support

Incorpora 2024 - Institutional support

CBCA Hackathons with Rede Anima - Opening and Award Ceremony Events - 255 participants

NASCC The Steel Conference - 7000 attendees

1st Brazilian Congress of Composite Structures - Institutional support

Lecture at a FAU-USP course: Building Construction - 100 participants

Rede Anima's Academic Week of Architecture and Design - Lecture on the use of steel in projects with different scales - 44 participants

CBPE - Brazilian Congress of Bridges and Structures - 250 participants

Offsite Construction Expo - 60 participants

Steel Arena at the Brazil Steel Congress & ExpoAço 2024 - Lectures: Steel Structures: Design, Specification and Fire Protection, Dialogue between Steel Structures and Modular Construction and The Mola Project and Steel Construction - 110 participants

1st CBCA Hackathon with Newton Paiva - Awards Ceremony - 70 participants

ENECE - National Meeting of Structural Engineering and Consulting / CBCA/ABECE Engineering Competition Awards Ceremony - 400 participants

7th Steel Frame & Industrialized Construction Congress - 300 participants

Online event to disseminate CBCA's statistical data - 50 participants Awards Ceremony for the 17th CBCA Architecture Student Competition - 70 participants

Engineering Week at Universidade Federal de Pernambuco - Lecture: BIM and Steel Structure Project Management - From Design to Assembly - 32 participants

Institutional support for the XI Cycle of Architectural Studies at Universidade Estadual de Maringá Announcement of the Program for Postgraduate Studies in Engineering of Metal Structures at UTFPR

8,741
PARTICIPANTS

PROMOTION & DISCLOSURE

ROADSHOW

DESIGN PRACTICES IN COMPOSITE STEEL & CONCRETE STRUCTURES

National circuit of technical lectures in four Brazilian cities (Curitiba, Recife, Brasília and Vitória), with partnerships being established with the main local entities and universities and with local cases being presented by the collaborators involved (new in 2024). Goal of training professionals and students in subjects related to steel construction.

+500

PARTICIPANTS
(IN-PERSON + ONLINE)

92%

EVALUATED THE LECTURES AS EXCELLENT/GOOD

92%

EVALUATED THE EVENT AS EXCELLENT/GOOD

PARTNERSHIP

PARTNERSHIPS

EXCHANGE WITH SIMILAR ORGANIZATIONS

worldsteel Association

- Joint actions to promote steel construction.

A L A C E R O – A s o c i a c i ó n Latinoamericana del Acero

- Support, as the Technical Secretariat, in the development of actions by CODUA (Committee for the Development of Steel Use).

- Coordination of the Brazilian participation in the 11th ALACERO Steel Design Competition for Architecture Students 2018.

PARTNERSHIPS NATIONAL ENTITIES & UNIVERSITIES

NATIONAL ENTITIES

AARS - Rio Grande do Sul Steel Association *(Associação do Aço do Rio Grande do Sul)*
ABCEM - Brazilian Association of Metal Construction *(Associação Brasileira da Construção Metálica)*
ABCLS - Brazilian Association of Light and Sustainable Construction *(Associação Brasileira da Construção Leve e Sustentável)*
ABINOX - Brazilian Stainless Steel Association *(Associação Brasileira do Aço Inoxidável)*
ABECE - Associação Brasileira de Engenharia e Consultoria Estrutural *(Brazilian Association of Structural Engineering and Consulting)*
ABENC - Brazilian Association of Civil Engineers– BA *(Associação Brasileira de Engenheiros Civis – BA)*
ABM - Brazilian Association of Metallurgy, Materials and Mining *(Associação Brasileira de Metalurgia, Materiais e Mineração)*
ABNT - Brazilian Association of Technical Standards *(Associação Brasileira de Normas Técnicas)*
ABPP - Brazilian Association of Passive Protection *(Associação Brasileira de Proteção Passiva)*
ABRAMAT - Brazilian Association of the Building Materials Industry *(Associação Brasileira da Industria Materiais de Construção)*
ABRAINC - Brazilian Association of Real Estate Developers *(Associação Brasileira de Incorporadoras Imobiliárias)*
AsBEA - Brazilian Association of Architectural Firms - CE, BA, MG *(Associação Brasileira do Escritórios de Arquitetura - CE, BA, MG)*
ASSOCIAÇÃO DRYWALL - Brazilian Drywall Association *(Associação Brasileira do Drywall)*
CAU - Architecture and Urbanism Board - DF, PR, ES and PE *(Conselho de Arquitetura e Urbanismo - DF, PR, ES and PE)*
CBIC - Brazilian Chamber of the Construction Industry *(Câmara Brasileira da Industria da Construção)*
CREA – Regional Engineering and Agronomy Boards - DF, PR, ES and PE *(Conselhos Regionais de Engenharia e Agronomia - DF, PR, ES e PE)*
CONFEA - Federal Engineering and Agronomy Board *(Conselho Federal de Engenharia e Agronomia)*
FIESP - Federation of Industries of the State of São Paulo *(Federação das Indústrias do Estado de São Paulo)*
FIRJAN - Federation of Industries of the State of Rio de Janeiro *(Federação das Indústrias do Estado do Rio de Janeiro)*
IAB - Brazilian Institute of Architects *(Instituto de Arquitetos do Brasil)*
ICZ - Non-Ferrous Metals Institute *(Instituto de Metais não Ferrosos)*
INDA - National Institute of Steel Distributors *(Instituto Nacional dos Distribuidores de Aço)*
SICEPOT - Heavy Construction Industry Union – MG *(Sindicato da Indústria da Construção Pesada – MG)*
SINAENCO - National Union of Consulting Engineering and Architecture Companies - CE and SP *(Sindicato nacional das empresas de engenharia consultiva e arquitetura - CE e SP)*
INDUSCON - Civil Construction Industry Union - DF, PR, ES and PE *(Sindicato da Indústria da Construção Civil - DF, PR, ES e PE)*

UNIVERSITIES

CENTRO DE ENSINO UNIFICADO DO DISTRITO FEDERAL LTDA.
CENTRO UNIVERSITÁRIO 7 DE SETEMBRO
CENTRO UNIVERSITÁRIO BELAS ARTES DE SÃO PAULO
CENTRO UNIVERSITÁRIO GERALDO DI BIASE
CENTRO UNIVERSITÁRIO SENAC SANTO AMARO
CENTRO UNIVERSITÁRIO UNINTER
COMPANHIA PERNAMBUCANA DE SANEAMENTO
ESCOLA DE ENGENHARIA DE SÃO CARLOS DA UNIVERSIDADE DE SÃO PAULO
ESCOLA POLITÉCNICA DA UNIVERSIDADE DE PERNAMBUCO
FACULDADE AGES DE SENHOR DO BONFIM
FACULDADE ANHEMBI MORUMBI - VILA OLIMPIA
FACULDADE DE ARQUITETURA E URBANISMO DA PONTIFÍCIA UNIVERSIDADE CATÓLICA DE CAMPINAS
FACULDADE DE ARQUITETURA E URBANISMO DA UNIVERSIDADE DE SÃO PAULO
FACULDADE DE ARQUITETURA E URBANISMO DA USP
FACULDADE DE ARQUITETURA URBANISMO E DESIGN DA UNIVERSIDADE DE SÃO PAULO
FACULDADE DE CIÊNCIAS E TECNOLOGIA DA UNIVERSIDADE ESTADUAL PAULISTA - FCT/UNESP
FACULDADE DE ENGENHARIA CIVIL, ARQUITETURA E URBANISMO DA UNICAMP
FAE CENTRO UNIVERSITÁRIO
FAU UFRJ - FACULDADE DE ARQUITETURA E URBANISMO
IFMG - INSTITUTO FEDERAL DE MINAS GERAIS - CAMPUS SANTA LUZIA
IFSP - INSTITUTO FEDERAL DE SÃO PAULO
ITA - INSTITUTO TECNOLÓGICO DE AERONÁUTICA NEWTON PAIVA
PUC-CAMPINAS - PONTIFÍCIA UNIVERSIDADE CATÓLICA DE CAMPINAS
PUC-PR - PONTIFÍCIA UNIVERSIDADE CATÓLICA DO PARANÁ REDE ÂNIMA
UCB - UNIVERSIDADE CATÓLICA DE BRASILIA
UCS - UNIVERSIDADE CATÓLICA DE SANTOS
UDC - ENTRO UNIVERSITÁRIO DINÂMICA DAS CATARATAS
UEMA - UNIVERSIDADE ESTADUAL DO MARANHÃO
UFAL - UNIVERSIDADE FEDERAL DE ALAGOAS - CAMPUS ARAPIRACA
UFC - UNIVERSIDADE FEDERAL DO CEARÁ
UFF - UNIVERSIDADE FEDERAL FLUMINENSE
UFG - UNIVERSIDADE FEDERAL DE GOIÁS / REGIONAL GOIÁS
UFJF - UNIVERSIDADE FEDERAL DE JUIZ DE FORA
UFLA - UNIVERSIDADE FEDERAL DE LAVRAS
UFMG - UNIVERSIDADE FEDERAL DE MINAS GERAIS
UFPR - UNIVERSIDADE FEDERAL DO PARANÁ
UFRJ - UNIVERSIDADE FEDERAL DO RIO DE JANEIRO
UFRS - UNIVERSIDADE FEDERAL DO RIO GRANDE DO SUL
UFSC - UNIVERSIDADE FEDERAL DE SANTA CATARINA
UFSJ - UNIVERSIDADE FEDERAL DE SÃO JOÃO DEL REIS
UFU - UNIVERSIDADE FEDERAL DE UBERLÂNDIA
UNEMAT - UNIVERSIDADE DO ESTADO DE MATO GROSSO
UNIBRASIL
UNIFOR - UNIVERSIDADE DE FORTALEZA
UNIGRAN - UNIVERSIDADE DA GRANDE DOURADOS
UNILA - UNIVERSIDADE FEDERAL DA INTEGRAÇÃO LATINO-AMERICANA
UNI-RN - CENTRO UNIVERSITÁRIO DO RIO GRANDE DO NORTE
UNITAU - UNIVERSIDADE DE TAUBATÉ
UNIVERSIDADE CRUZEIRO DO SUL - UNIDADE SÃO MIGUEL PAULISTA
UNIVERSIDADE DE MOGI DAS CRUZES
UNIVERSIDADE DO VALE DO PARAÍBA
UNIVERSIDADE PRESBITERIANA MACKENZIE
UNOESC - UNIVERSIDADE DO OESTE DE SANTA CATARINA
UNOESC - UNIVERSIDADE DO OESTE DE SANTA CATARINA - CAMPUS DE SÃO MIGUEL DO OESTE
UP - UNIVERSIDADE POSITIVO
USJT - UNIVERSIDADE SÃO JUDAS TADEU
UTFPR - UNIVERSIDADE TECNOLÓGICA FEDERAL DO PARANÁ
UVV - UNIVERSIDADE VILA VELHA

QUALITY PROMOTION & STANDARDIZATION

QUALITY PROMOTION & STANDARDIZATION

TECHNICAL STANDARDS

ABNT NBR 8800:2024 - Standard completed and published.

ABNT NBR 15253 - Standard completed and submitted for Public Consultation.

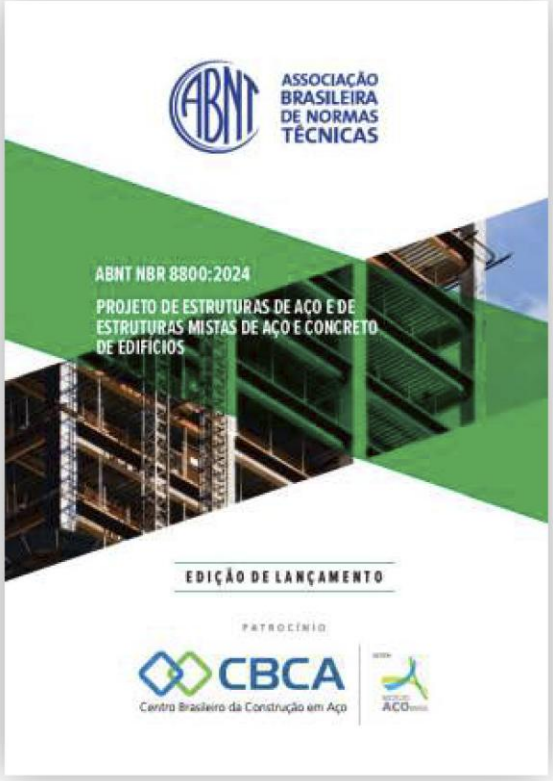
CE 28:001.007 - Steel Tiles & Panels - Standard in progress

ABNT/CEE-231 - Design of Metal, Wood, Concrete and Composite Structures and Inspection of Metal, Wood and Composite Structures: Standard in progress.

CE 003:082.001 - Photovoltaic Conversion System - Standard in progress.

ABNT NBR 15217 - Steel Studs for Constructive Systems for Gypsum Plaster Plates for Drywall Requirements and Test Methods - Standard under revision.

LSF Facades Technical Committee - In progress.



TECHNICAL MATERIAL DEVELOPMENT

TECHNICAL MATERIAL DEVELOPMENT

REA - STEEL STRUCTURE MAGAZINE

The publication, which has a scientific focus, has an active and independent editorial board that evaluates articles. Its 13th published volume contains 3 editions, with a total of 12 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 in digital networks.

37,961
VISITS

Devices:
Desktop: 2,594
Mobile: 15,875
Tablet: 528

23,821
VIEWS

19,022
NEW USERS

TECHNICAL MATERIAL DEVELOPMENT

BRAZIL GUIDE TO STEEL CONSTRUCTION

The Brazil Guide to Steel Construction is a pioneering initiative by the Brazilian Center for Steel Construction (CBCA), with the support of the the Brazilian Association of Metal Construction Association (*Associação Brasileira da Construção Metálica - ABCEM)*, aimed at the growth of the industry. It maps and publicizes the production chain that is part of steel construction, facilitating consumer access to the different products, services and solutions available on the market.

The Guide is continually updated in order to expand its scope and coverage, incorporating new segments of steel construction and new participants.

13,222
VISITS

6,371
DOWNLOADS

1,394
NEW USERS

1,008
PARTICIPATING COMPANIES

01:16s
AVERAGE TIME

56.8%
ENGAGEMENT RATE

TECHNICAL MATERIAL DEVELOPMENT

STEEL CONSTRUCTION MANUALS

26,004
MANUAL DOWNLOADS

1,949
SOFTWARE DOWNLOADS

Manuals Completed in 2024:

- Vertical Sealings & Facades

Editions Scheduled for 2025:

- ABNT NBR:8800 Easy-to-Use Manual - (revision)
- Multi-Use Warehouse Manual - (revision)

WORKFORCE QUALIFICATION

WORKFORCE QUALIFICATION

HACKATHON

PURPOSE

Practical activity focused on developing a project based on an actual need. Students received guidance from course professors and tutors. Two editions were held in 2024 in partnership with Rede Anima and one with Universidade Newton Paiva with the following respective topics: “Bus Stop in Metal Structure” and “MOVE Urban Stations”

At Rede Anima, the challenge was presented within two subjects, one in architecture and one in civil engineering from 13 universities of the Network. 1704 students took the subjects that participated in the Hackathons, accounting for the two semesters of 2024.

At Universidade Newton Paiva, the City Hall of Belo Horizonte was involved, from the choice of the topic to the judging and analysis of the projects. 40 students participated in the edition.

1,744
STUDENTS

WORKFORCE QUALIFICATION

PROFESSOR TRAINING COURSE

PURPOSE

Professor Training Course - To update professors of the Metal Structures Subject on the choice of materials and the dimensioning of structural steel elements for buildings in accordance with ABNT standards, in addition to providing important notions of aspects connected to constructability (detailing, manufacturing, transportation, assembly and durability).

PROFESSOR

Fernando Ottoboni Pinho.

FOCUS

Civil engineering courses at universities in the Midwest Region.

LOCATION/DATE

Brasília / September 23rd - 27th, 2024

PARTICIPATION

Presence of at least one professor per State in the Region for a total of 23 participants, from 20 different campuses, three of whom are civil engineers in the Army;

PROGRAM

Based on the most relevant topics related to steel construction, with support from CBCA technical manuals and manuals/catalogs from associates, with a duration of 40 hours.

PARTICIPATING UNIVERSITIES

FUNDAÇÃO UNIVERSIDADE FEDERAL DA GRANDE DOURADOS
INSTITUTO FEDERAL DE EDUCAÇÃO, CIÊNCIA E TECNOLOGIA DE BRASÍLIA
INSTITUTO FEDERAL DE EDUCAÇÃO, CIÊNCIA E TECNOLOGIA DE MATO GROSSO DO SUL
INSTITUTO FEDERAL DE EDUCAÇÃO, CIÊNCIA E TECNOLOGIA GOIANO
INSTITUTO FEDERAL DE GOIÁS
PONTIFÍCIA UNIVERSIDADE CATÓLICA DE GOIÁS
UNIVERSIDADE DE BRASÍLIA
UNIVERSIDADE DO ESTADO DE MATO GROSSO
UNIVERSIDADE FEDERAL DE CATALÃO
UNIVERSIDADE FEDERAL DE MATO GROSSO
UNIVERSIDADE FEDERAL DO MATO GROSSO DO SUL

TESTIMONIALS

"We would like to thank CBCA for the opportunity to take part in such a high-level course as the Metal Structures Training for Professors course, held in Brasília. We had the opportunity to learn not only from Professor Fernando Pinho, but also from students who are PhDs and Masters in Civil Engineering. It was a week of intense knowledge that will serve to consolidate the knowledge we have acquired during our professional lives". (Captain Sergio Ricardo da Silva)

"The Course had excellent quality, and the professor was amazing. I am sure you will reap many future benefits from this excellent initiative. I am immensely grateful for the opportunity to participate".

WORKFORCE QUALIFICATION

VIDEO LESSONS

STEEL CONSTRUCTION FEATURES

ECONOMIC VIABILITY OF STEEL STRUCTURES

PROFILE TYPES

CONNECTIONS

TRANSPORTATION AND ASSEMBLY OF STEEL STRUCTURES

FIRE SAFETY IN BUILDINGS

ANTI-CORROSION PROTECTION

STRUCTURAL STEELS

STRUCTURAL CONCEPT

OUTER SEALINGS & SLABS

VIDEO LESSON WITH
THE MOST DOWNLOADS

STEEL CONSTRUCTION FEATURES

538
VISITS

1,587
PAGE VIEWS

1,273
DOWLOADS

WORKFORCE QUALIFICATION

PROMOTION OF COURSES

ONLINE COURSES

- INTRODUCTION TO STEEL CONSTRUCTION
- EXECUTION OF STEEL STRUCTURES
- STEEL STRUCTURAL SYSTEMS
- LIGHT STEEL FRAMING
- SIZING OF STEEL STRUCTURES - UPDATE IN ACCORDANCE WITH NBR 8800:2024

204
STUDENTS

IN-PERSON COURSES

- INDUSTRIAL STEEL WAREHOUSES

10
STUDENTS

Undergraduate Course - UFRJ

Classes started in April/24, ending in August/24.

The “Manufacture, Transportation and Assembly of Steel Structures” course was taught to 10 students.

Mackenzie Postgraduate Studies

Collaborators Flávio Gaiga and Adriano Lima were the partners in this action, the result of the partnership between CBCA, the university and ABECE. Around 30 students received 12 hours of content on steel construction, advancing in 2024 to sizing of metal structures.

WORKFORCE QUALIFICATION

SCHOLARSHIPS

SCIENTIFIC INITIATION SCHOLARSHIP

The scholarship from UFRJ - Universidade Federal do Rio de Janeiro, themed: “Structural design of innovative prefabricated rigidity cores in steel and concrete for multi-level buildings”, developed during 2024, was completed with the submission of the final report. Also in 2024, a new selection process was held, where research proposals were received and the work by UESC - Universidade Estadual de Santa Cruz was chosen as the winner, themed: Dynamic monitoring of composite steel and reinforced concrete bridges. The project will be developed throughout 2025, with submission scheduled for December 2025.

2024 ACTIVITIES REPORT

www.**cbca-acobrasil**.org.br

CBCA
Brazilian Center for Steel Construction

MANAGER:
BRAZIL STEEL INSTITUTE