

Atlas of Details



Daniel Burnham. Reliance Building 1890-1895

Author(s): Michela Maran

Copyright: © 2023 The Formwork

URL: <https://www.detailsinsection.org/archives/projects/reliance-building>

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior permission of the publisher. For permission requests regarding the partial or total reproduction of this item, write to the editor at the address below.

Please note: printing of this item for personal, noncommercial use is permitted. The graphic materials contained here have been produced for an optimised screen visualisation. For a good quality print, original full bleed sheet format (A2 horizontal) are to be maintained; inkjet plotting on opaque coated paper should be preferred.

Atlas of Details is a research project to demonstrate how insightful a section can be, in order to represent the complexity of the architectural artifact, since it allows the simultaneous perception of materiality and form, of building envelope and interior spaces. Atlas of Details is a project by The Formwork, an association established by professors and PhD candidates with diverse academic backgrounds (history, architectural design, technology, preservation) working at the IUAV University in Venice and at the Milan Politecnico. For more information about the Atlas of Details and The Formwork, please contact info@theformwork.org.

The Formwork

Cultural association

Cannaregio 638,

30121 Venezia (VE)

<https://www.theformwork.org/staging>

<https://www.detailsinsection.org/staging>

info@theformwork.org

Daniel Burnham

Reliance Building

1890-1895

Text

Michela Maran
IUAV Venezia

Drawings

Michela Maran
IUAV Venezia

Architects

Daniel Hudson Burnham (1846-1912)
John Wellborn Root (1850-1891)
Charles Bowler Atwood (1849-1896)

Name of the building

Reliance Building

Site

Washington St.,
Loop Historical Retail District,
Chicago (Illinois, United States)

Client

William Ellery Hale (1836-1898)

Engineer

Edward Clapp Shankland (1854-1924)
George A. Fuller (1851-1900)

Other actors

Baldwin Development Company (restoration project leader)
McCluer studio (restoration co-designer)
UBM Inc (restoration co-designer)
T. Gunny Harboe (restoration supervisor)

Start of construction works

1891

Project variations

Root's first version of the project was a 16-th story tower building. Only the ground floor was built before the architect's premature death. The design work resumed in 1894, but sadly there was no trace left of Root's drawings of the upper floors. The new project was designed by Atwood, maintaining the structural grid set by Root but using new construction technologies.

End of construction works

1891 conclusion of ground floor construction works
1894 conclusion of the upper floor construction works
1895 official grand-opening

Restoration

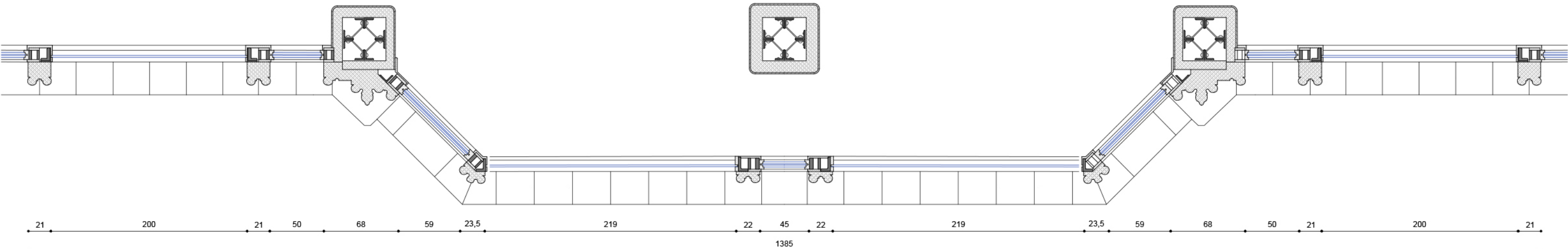
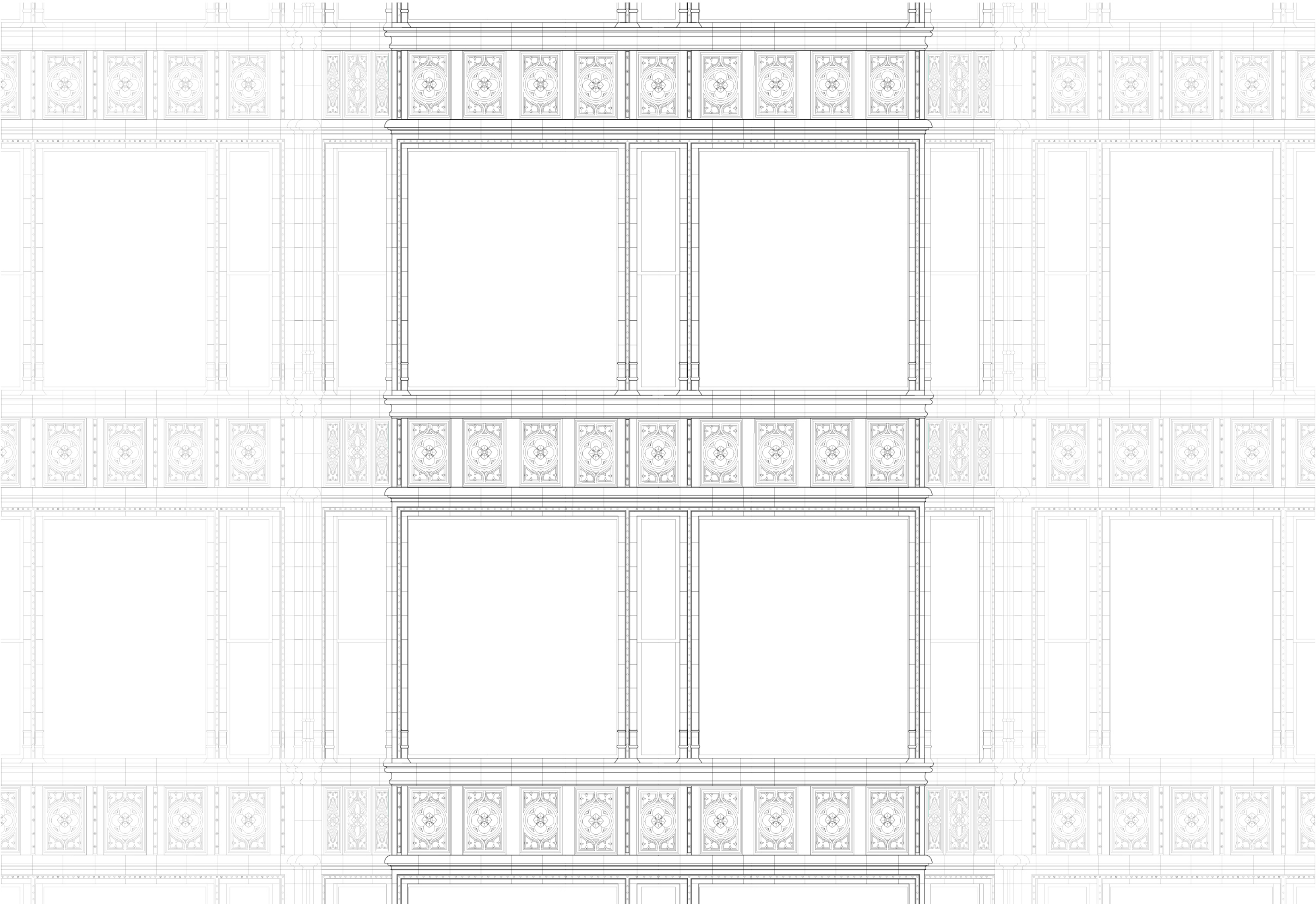
In 1994 the City of Chicago funded the building's renovation, which primarily involved the exterior and interior cladding.

Recognition

1976 designated as Nation Historic Landmark of United States

Construction system

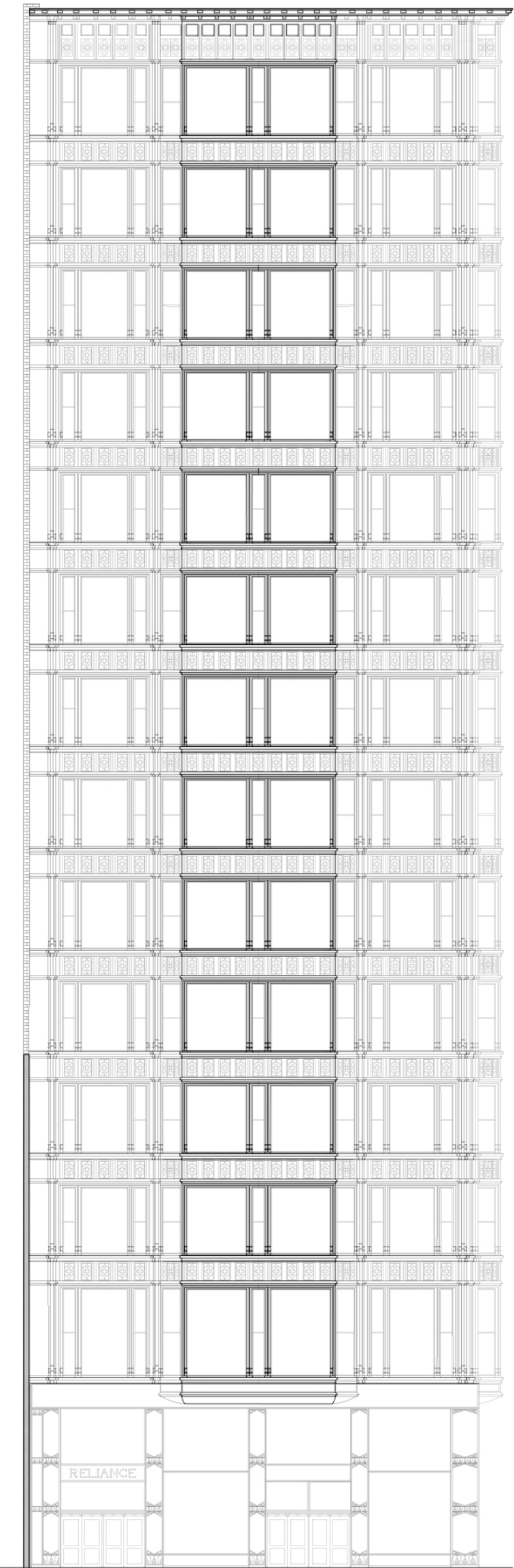
Iron structure vertically composed of pillars having an H section on the ground floor and gray columns on the upper floors.
The horizontal bracing along the facade is reached through plate girders. The internally placed beams are connected horizontally by tie rods.
The pillars and the structure on the outer edge of the building are covered in terracotta tiles for fireproofing.



Detail of the Bow window and Chicago window in plan and elevation

Scale 1:35

0 25 100 cm



140 334 65,5 334 65,5 332 65,5 332 107 87
1855

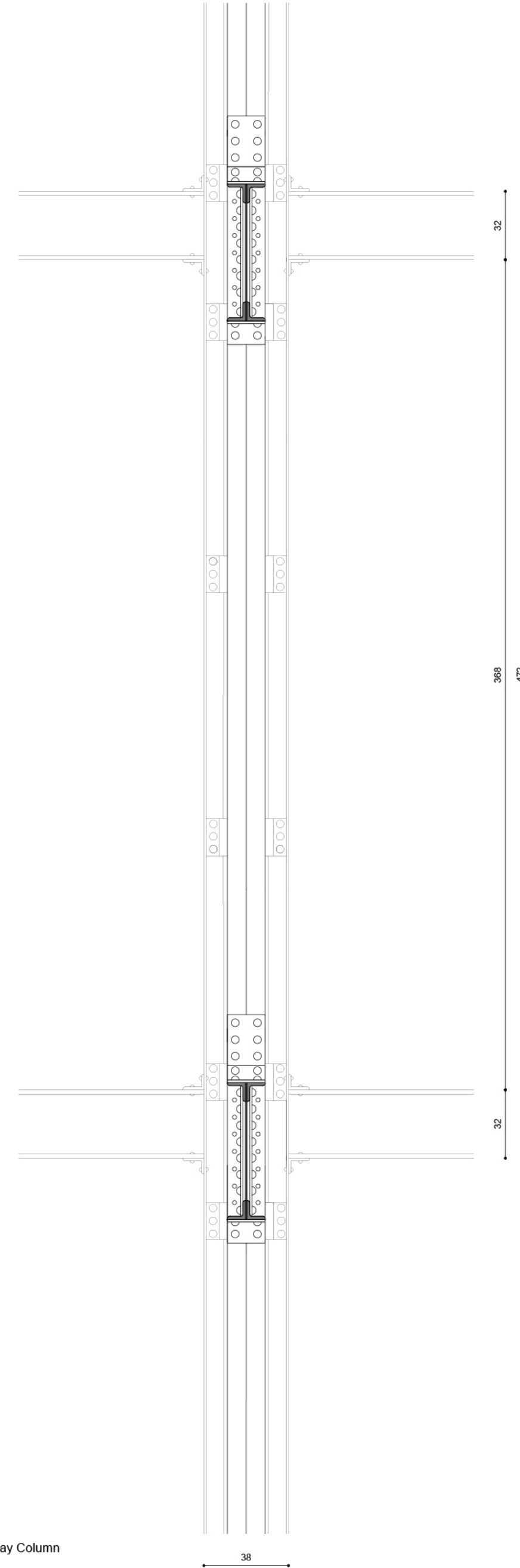
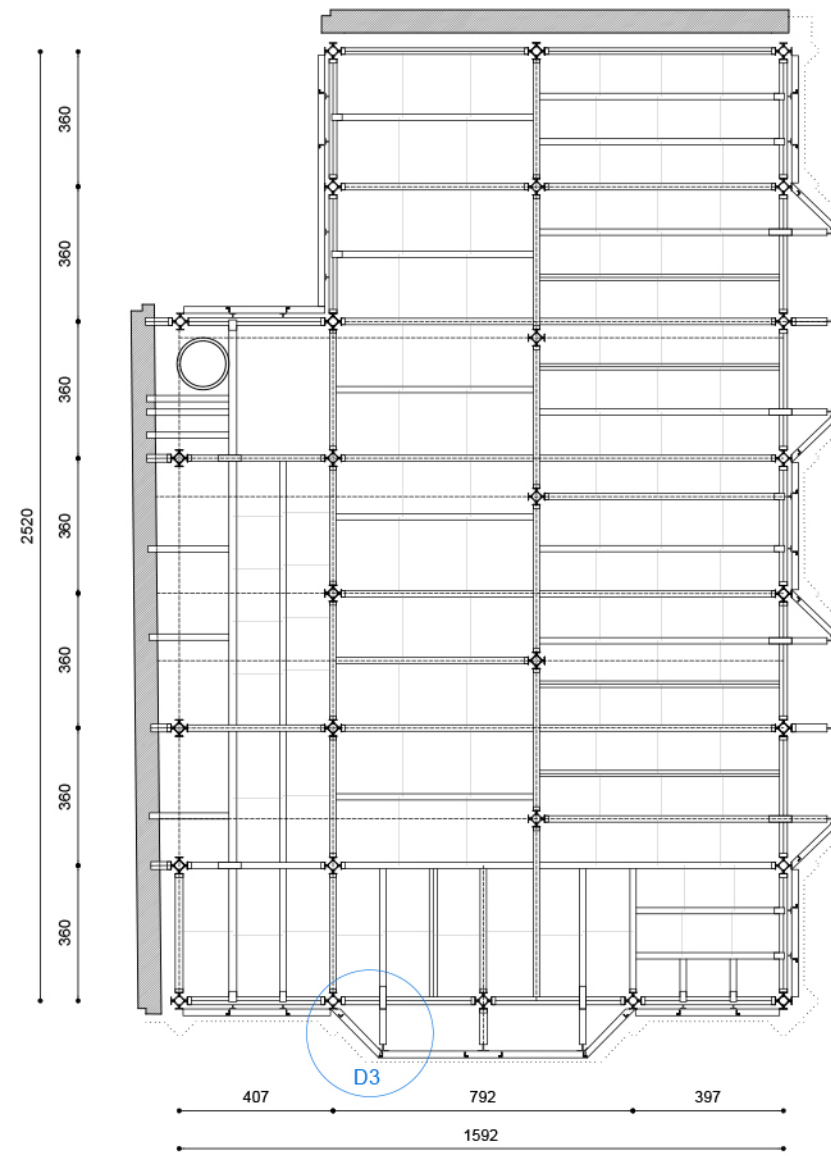
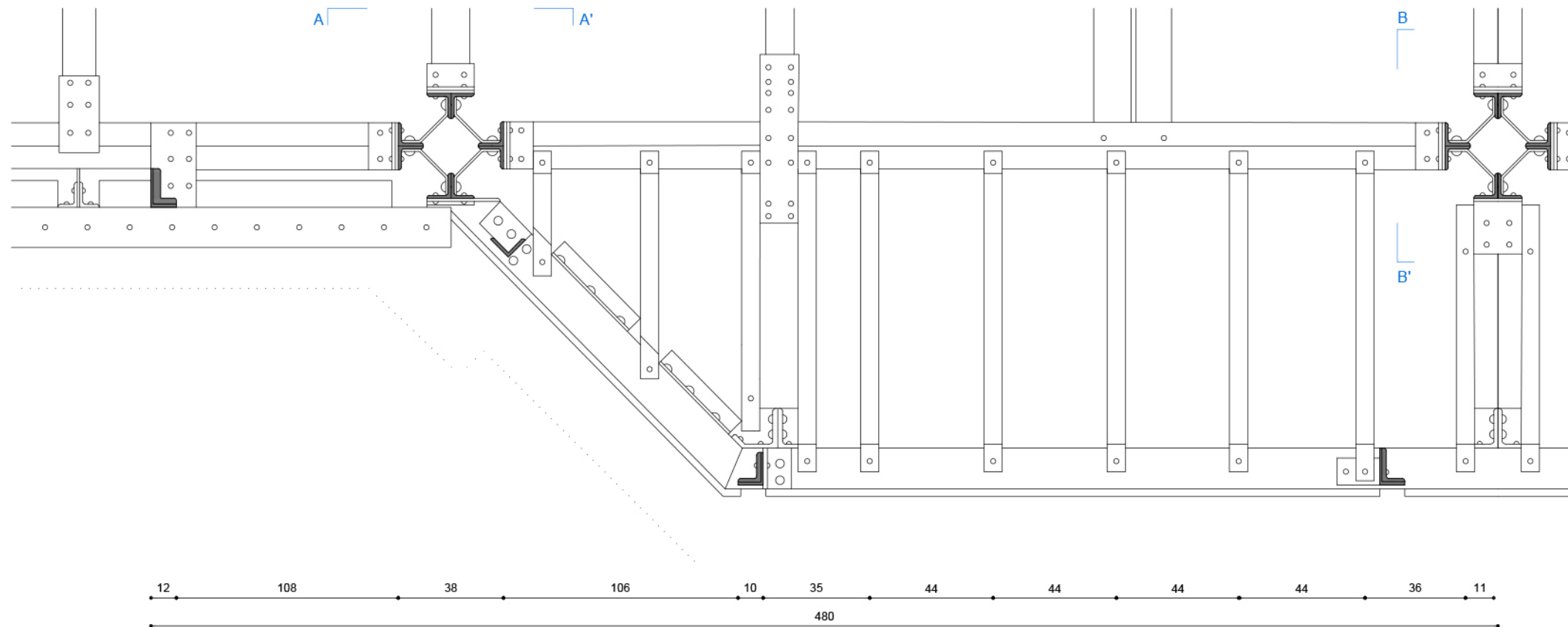
East elevation

Scale 1:200

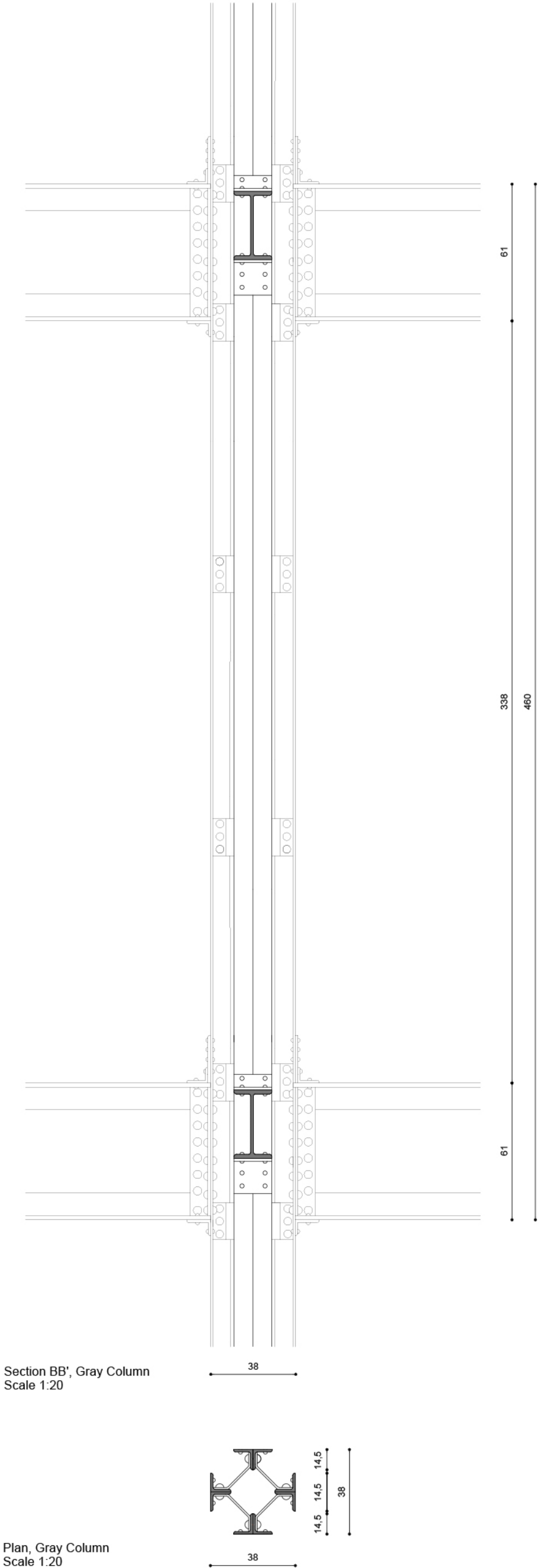
0 1 5 m

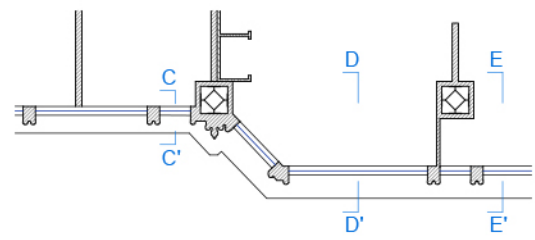
-

A horizontal scale bar with tick marks at 0, 1, and 5 m.

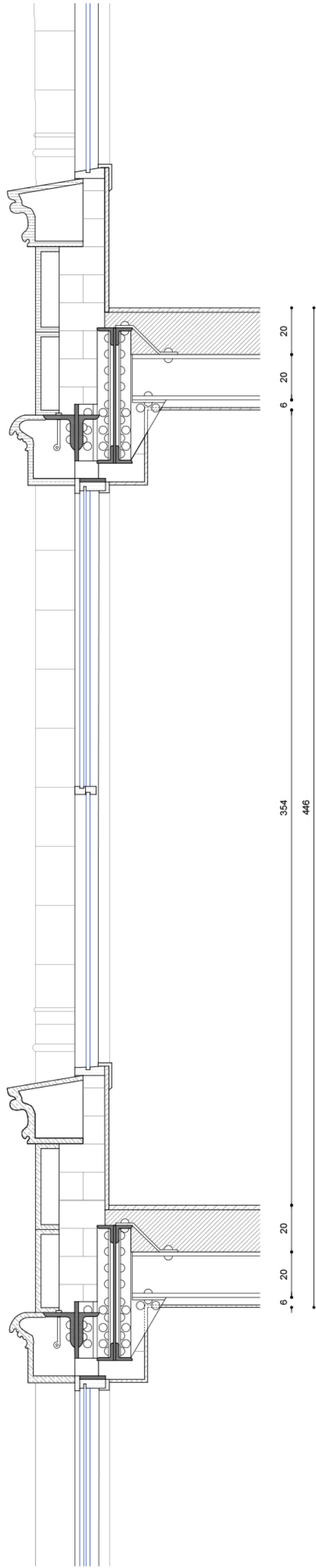


A horizontal scale bar with markings at 0, 20, and 100 cm. The bar is divided into segments by vertical lines. The first segment from 0 to 20 is shaded light blue. The second segment from 20 to 40 is shaded light green. The third segment from 40 to 60 is shaded light red. The fourth segment from 60 to 80 is shaded light yellow. The fifth segment from 80 to 100 is shaded light purple.

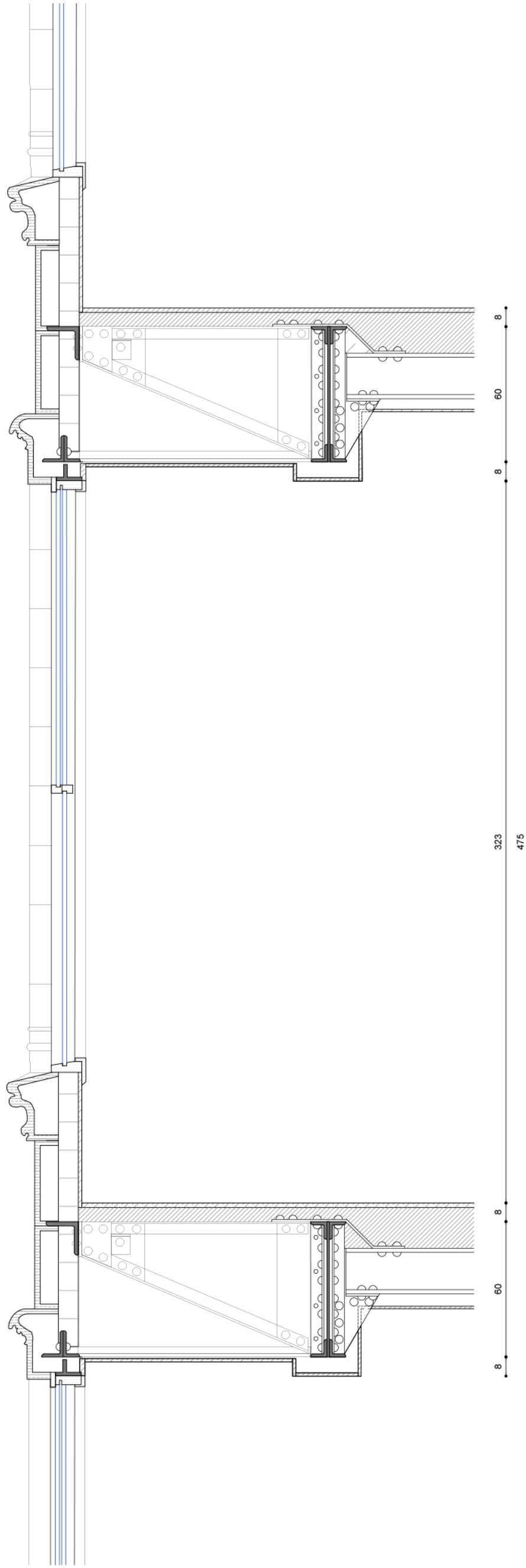




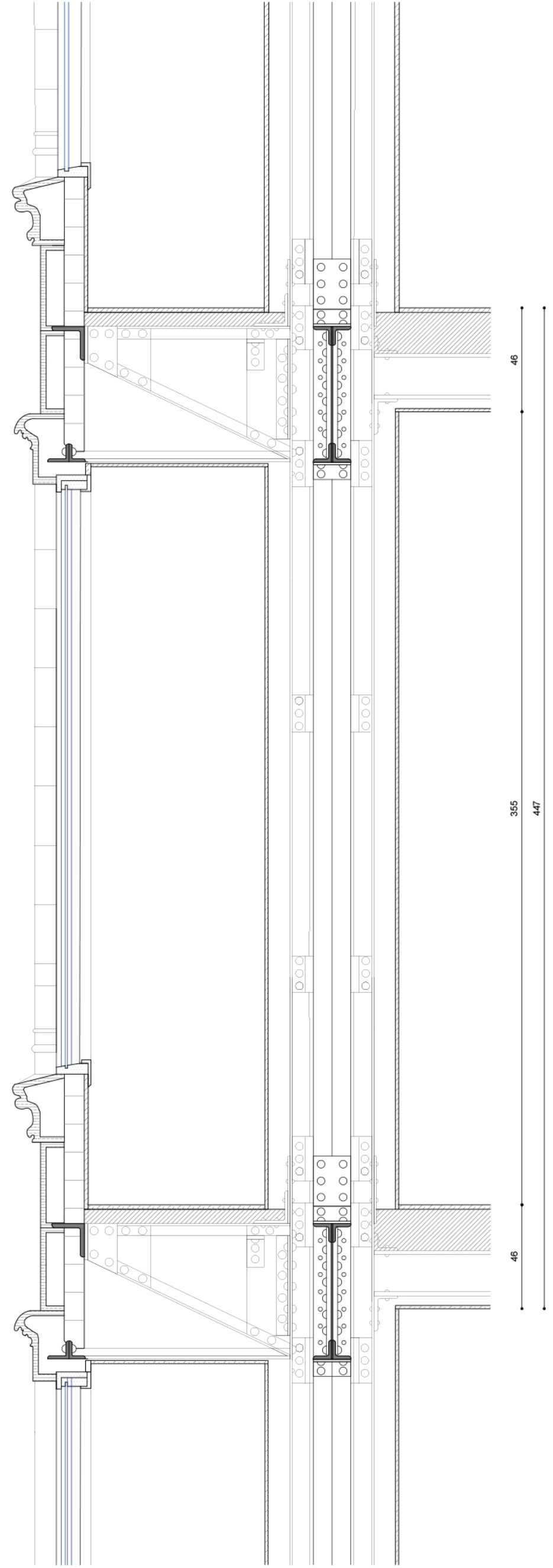
Sections CC', DD', EE'
Scale 1:20



Section CC', Chicago window
Scale 1:20



Section DD', Bow window
Scale 1:20



Section EE', Bow window
Scale 1:20