

AISC database and weldment profiles

CAD-053 / REV A / 2026.09.01

Use a traceable section database to build consistent structural member geometry and descriptions. Work on a copy first. Record application version, units and active document/configuration. Names below identify the catalogued workflow; they do not claim a particular button layout or verified implementation.

STATUS	Starting Point
CLASSIFICATION	CAD
MATERIAL	CAD / AUTOMATION
DISPOSITION	PUBLIC / STARTING POINT
CATEGORY	CAD / Scanning / Automation
RECORD TYPE	how-to

TECHNICAL NOTES

Use a traceable section database to build consistent structural member geometry and descriptions.

GOAL

Run the first test described in this guide and record the result for aisc database and weldment profiles.

SOURCE STATE

Operational reference/specification; original rule or add-in source not inspected

PREPARATION / NOTES

Work on a copy first. Record application version, units and active document/configuration. Names below identify the catalogued workflow; they do not claim a particular button layout or verified implementation.

EQUIPMENT

- CAD / automation tool
- Representative test model
- Measurement or inspection method

METHOD / STEPS

1. Select the intended database edition and distinguish US customary and metric fields.
2. Map section designation, dimensions and relevant properties without rounding the stored source data prematurely.
3. Create or select a weldment profile with a deliberate insertion point and orientation.
4. Compare a generated member to the source dimensions and verify cut-list naming.

THINGS TO WATCH FOR

An AISC shape database is not a structural design approval or a guarantee of mill availability. Profile origin changes can shift an entire frame.

FIRST TEST / WHAT TO RECORD

A known section matches key dimensions and uses the intended insertion reference.

RESULT / WHERE THIS STANDS

A known section matches key dimensions and uses the intended insertion reference.

TROUBLESHOOTING

- An AISC shape database is not a structural design approval or a guarantee of mill availability. Profile origin changes can shift an entire frame.

SPECIFICATION

TOOL PATH	CAD / automation tool
DELIVERABLE	HOW-TO
VALIDATION	Representative model / known dimension
STATUS	Starting Point

DEVELOPMENT HISTORY

2026.09.01 / Rev A

Imported as an independent manifest record; public copy keeps uncertainty visible.

REFERENCE NOTES

Official aisc.org reference (<https://www.aisc.org/aisc/explore-aisc/aisc-shapes-database-v160/>).

HOW-TO SOURCES

Official aisc.org reference

<https://www.aisc.org/aisc/explore-aisc/aisc-shapes-database-v160/>

RELEASED MATERIAL / SOURCE LINKS

cad-053-public-summary.txt

PUBLIC SUMMARY / RECOVERED NOTES

<https://u225x.com/downloads/manifest-records/cad-053-public-summary.txt>

RETURN TO THE LIVING RECORD

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This PDF preserves the public notes at this revision. Visit the record for updates and attached images.

<https://u225x.com/record/CAD-053>