

LoopCAD® is the premiere software for the creation of professional quality designs and circuit layout drawings for radiant heating and snowmelt systems. LoopCAD 2023 offers many advanced design features, including ACCA®-Approved calculations for Manual J® residential heating and cooling loads in the MJ8 Edition. LoopCAD is the easiest, most powerful radiant heating design tool available.

Download the free 30-day trial at:

www.LoopCAD.com/Downloads

Standard Edition	<ul style="list-style-type: none"> Floorplan drawing and importing (PDF, AutoCAD, JPG) Automated circuit generation Easy Freehand circuit drawing and circuit editing Hydronic calculations based on manual input of heat loads (<i>automated heat loss calculations not included</i>) Supply/Return distribution piping 3D drawing views OEM Editions for detailed materials lists/quotations
Professional Edition	<ul style="list-style-type: none"> All features in Standard Edition, plus... Automated heat loss calculations as you draw ASHRAE residential heat loss calculations CSA residential heating and cooling load calculations
MJ8 Edition	<ul style="list-style-type: none"> All features in Professional Edition, plus... ACCA-Approved Manual J (8th Edition) residential heating and cooling load calculations

General

		Standard	Professional	MJ8
1	Create professional radiant heating circuit layout drawings quickly and easily	•	•	•
2	Perform room-by-room residential heating and cooling* load calculations as you draw		•	•
3	Perform detailed hydronic calculations	•	•	•
4	Commercial Mode with special tools for commercial projects (select Editions only)	•	•	•
5	Stand-alone program: AutoCAD ¹ is not required	•	•	•
6	Easily create new floor plan drawings or import existing drawings (PDF ² , AutoCAD, JPG)	•	•	•
7	3D Views automatically generated as you draw in 2D	•	•	•
8	Support for slab, thin slab and in-joist radiant heating designs	•	•	•
9	Make design changes in seconds - tube spacing, number of loops, pattern type and more	•	•	•
10	Quick Design Mode allows complete radiant designs without detailed circuit layouts	•	•	•
11	Supply/Return Distribution Piping feature	•	•	•
12	Custom Tables can be added to drawings for display of key design data	•	•	•
13	Insert Images to help show design/project details	•	•	•
14	Support for both IP (US) units and SI (Metric) units	•	•	•
15	Drawings and design reports can be printed or exported to PDF files	•	•	•
16	Report Packages lets you assemble multiple reports into a single PDF	•	•	•
17	Notes Library lets you save and reuse frequently used notes	•	•	•
18	Saving of Equipment Report items for documenting of HVAC equipment	•	•	•
19	Export to Excel features for key design data and materials lists	•	•	•
20	Video Tutorials and Help file get you up and running fast	•	•	•
21	Free program updates and technical support included with active subscription	•	•	•

* Cooling loads available with CSA or Manual J calculation methods only.

Floorplan Drawing

		Standard	Professional	MJ8
22	Importing of AutoCAD, PDF and Scanned Drawing files for use as a drawing template	•	•	•
23	Easy drawing of rooms with predefined shapes or freehand	•	•	•
24	Draw in-room objects that can affect circuit patterns, like stairs and cabinets	•	•	•
25	Enhanced wall tools include Curve Wall and Wall Bump-Out	•	•	•
26	Snap to outline of existing floorplan drawing ensures proper vertical alignment	•	•	•
27	Smart dimension labels automatically display dimensions and allow in-place editing	•	•	•
28	Advanced PDF Scaling option for drawings that do not display dimensions	•	•	•
29	Custom definition of joist properties	•	•	•
30	Merge Rooms to reduce unit loads for small areas	•	•	•
31	Easily add Clerestory Walls and Windows	•	•	•
32	Rotate drawings temporarily for easier circuit drawing on angled floorplans	•	•	•

Circuit (Loop) Drawing

		Standard	Professional	MJ8
33	Automatic circuit generation, even in complex room shapes	•	•	•
34	Many circuit pattern options including single and double serpentine, double serpentine with fill region, perimeter, wide-radius serpentine (in-joist), counterflow	•	•	•
35	Automated Counterflow circuit patterns – spiral and serpentine options	•	•	•
36	Automatically generates in-joist serpentine patterns with 2-line and 3-line options	•	•	•
37	Custom Circuit Areas to subdivide larger rooms and snow melt areas for optimum auto-circuit generation	•	•	•
38	Circuit lengths calculated and updated automatically	•	•	•
39	Option for circuits to go around or under obstructions (cabinets, islands,...)	•	•	•
40	Multiple tube spacing supported within the same room	•	•	•
41	Easily edit the automatic circuits to optimize your design	•	•	•
42	Fast freehand drawing for fully custom circuits in any room or groups of rooms	•	•	•
43	Copy, Flip and Rotate circuits and groups of circuits	•	•	•
44	Flow direction setting with special color shaded view, with auto direction option	•	•	•
45	Tubing above/below subfloor options	•	•	•
46	Offset Circuits function for quick drawing along complex walls or edges	•	•	•
47	Draw multiple leaders from room to manifold in a single operation	•	•	•
48	Auto-connect of nearby circuits to a manifold	•	•	•
49	Manifolds capable of connecting to circuits on multiple floorplans or levels.	•	•	•

Load Calculations

		Standard	Professional	MJ8
50	ASHRAE 2017 residential heat loss calculations performed as you draw		•	•
51	CSA F280-12 (R2021) residential heating and cooling load calculations		•	•
52	NEW CSA F280-12 Annex D Summary Report		•	•
53	ACCA-Approved Manual J calculations for residential heating and cooling loads (8 th Edition Version 2.5)			•
54	Manual J advanced calculations support			•
55	Manual J block and room load calculations			•
56	Manual J AED (Adequate Exposure Diversity) calculations and graphs			•
57	Manual J Peak Load Procedure option			•
58	Manual J October cooling load evaluation automatically performed			•
59	Manual J estimated room CFM			•
60	Manual J calculations for Infiltration for Maximum ACH50 values			•
61	Manual J Review step to assist with project analysis and review			•
62	Manual J approved report formats			•
63	Create custom climate locations and save for reuse on other projects		•	•
64	Ability to specify rooms heated by radiant, baseboard, forced air or other heat	•	•	•
65	Automatic calculation of required supplemental heat based on radiant circuit design	•	•	•
66	R-value lists for all major structural components		•	•
67	Custom Construction Library to save your custom construction items for re-use		•	•
68	Support for cold partitions with editing of cold side temperatures		•	•
69	Manual input of heat loads and back losses	•	•	
70	Project Wizard guides you through the setup of construction defaults for your project		•	•
71	Project Templates to save your common project settings for re-use	•	•	•
72	Estimated Air Flow (CFM) calculations		•	•
73	Graphical views of calculated unit heat load data via color shading of rooms		•	•
74	Spreadsheet style view of data provides easy review and analysis	•	•	•
75	Heat loss summary and detailed report options		•	•

Hydronic Calculations

		Standard	Professional	MJ8
76	Hydronics heating calculations based on calculated heat load data		•	•
77	Hydronics calculations based on optional manual heat load data input	•	•	•
78	Calculates required surface, panel, and water supply temperatures	•	•	•
79	Easy adjustment of water temperature using slider tool	•	•	•
80	Fluid flow rate and head loss calculations for tubing, manifolds and Supply/Return Piping	•	•	•
81	Support for water only or glycol mixtures	•	•	•
82	Independently set the Fluid ΔT and Fluid Type for individual manifolds	•	•	•
83	Variable or fixed temperature drop settings	•	•	•

		Standard	Professional	MJ8
84	Automatic detection of areas left unheated	•	•	•
85	Calculations for circuits spanning multiple rooms and with different unit heat loads	•	•	•
86	Radiant panel types can be assigned for the entire floorplan or room-by-room	•	•	•
87	3D models of radiant panel structures	•	•	•
88	Zone assignments can be edited in drawing view or data view	•	•	•
89	Graphical views of calculated data via color shading of rooms	•	•	•
90	Spreadsheet style view of data provides easy review and analysis	•	•	•

Snowmelt Design

		Standard	Professional	MJ8
91	Calculation of snowmelt loads using ASHRAE methods (select US cities only)		•	•
92	Manual input option for snowmelt loads	•	•	•
93	Calculates supply water temperatures	•	•	•
94	Automatic circuit generation	•	•	•
95	Freehand drawing tools for manual circuits same as in radiant heating	•	•	•
96	Support for concrete, asphalt and paver installations	•	•	•
97	Flow rate and head loss calculations	•	•	•
98	Specify Unheated Snow Melt Areas (central regions surrounded by heated areas)	•	•	•
99	Drawing of distribution piping with curved or straight lines (select Editions only)	•	•	•
100	NEW Custom Table for display of snow melt panel data	•	•	•

OEM (Manufacturer) Editions

		Standard	Professional	MJ8
101	Easily install OEM Editions from participating Manufacturers at no additional cost**	•	•	•
102	OEM database of components with pictures and specifications	•	•	•
103	Product pricing (if supplied by OEM)	•	•	•
104	Automated web-based updates for product prices	•	•	•
105	Integration of OEM components and design parameters into the design process, including tubing types, manifolds, controls, panel outputs, water temperatures, etc.	•	•	•
106	Calculation of OEM-specific materials lists	•	•	•
107	Full quotation features and reports	•	•	•
108	Free Spreadsheet-Mode for quick designs without a drawing (select OEM Editions only)	•	•	•

** No additional cost for non-locked generic licenses only.