

MecaWind and MecaWind Pro

MecaWind is a cost effective program used by Engineers and designers to perform Wind calculations per ASCE 7-05 and ASCE 7-10. The program is simple to use, and offers a professional looking output with all necessary wind calculations.

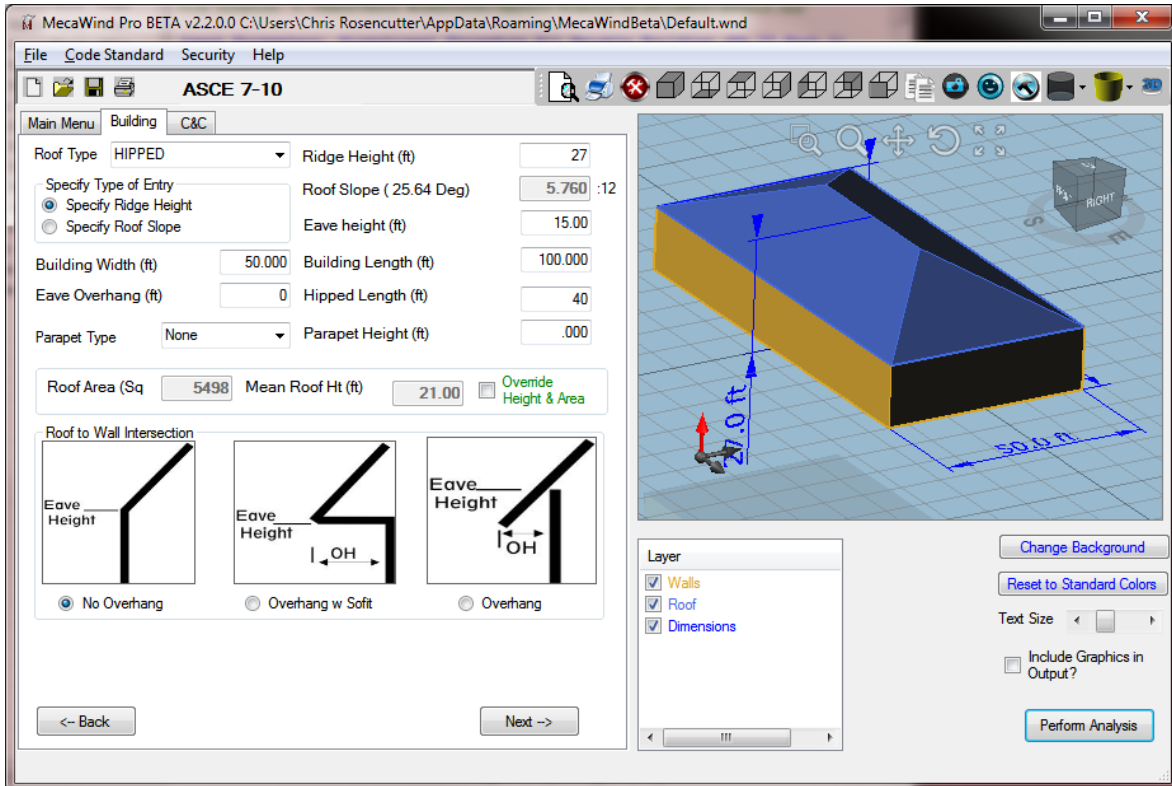


Figure 1 – User Interface

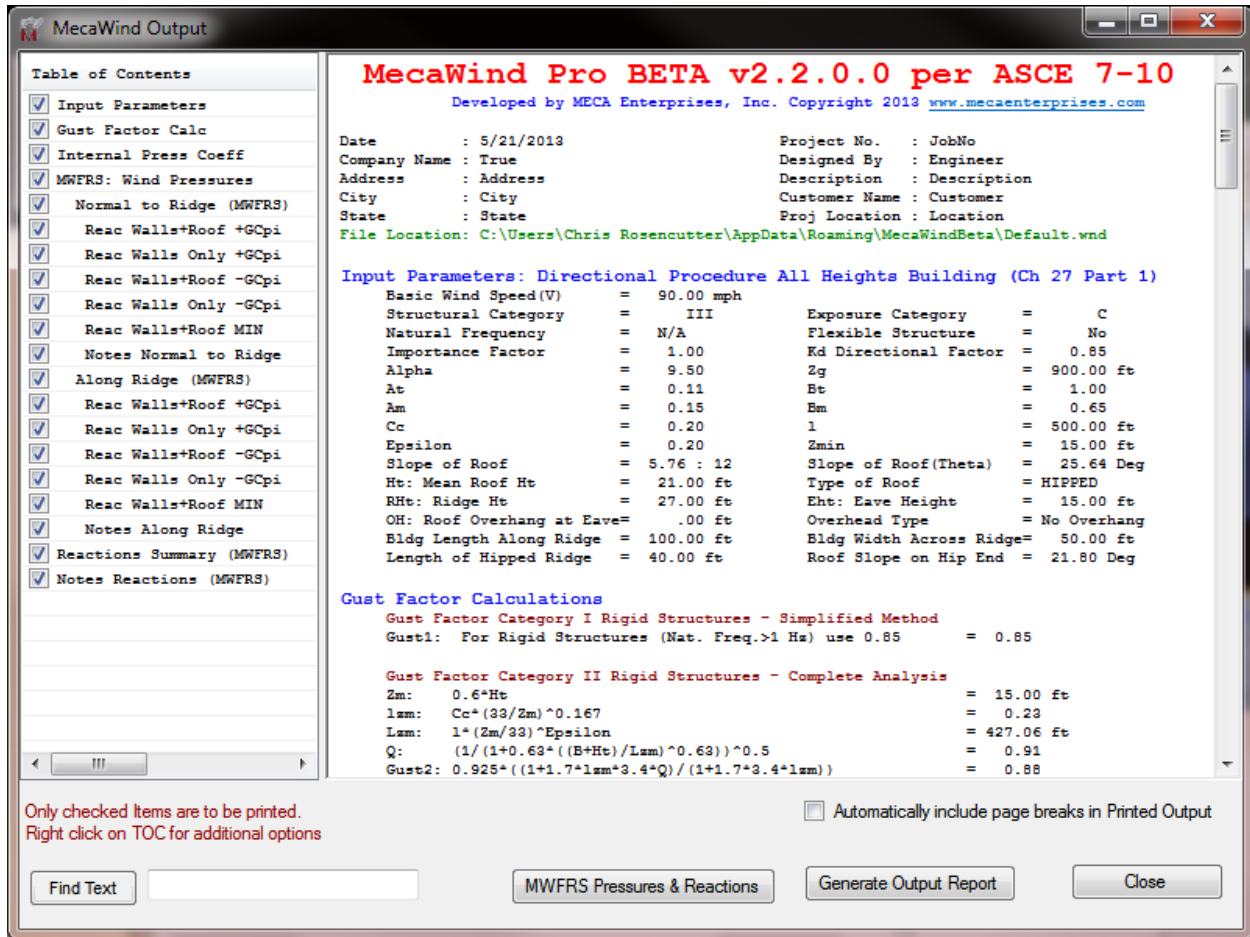


Figure 2 – Output Screen

MecaWind Pro:

The base version of the software is MecaWind, and it offers the most cost effective option of performing wind calculations. MecaWind Pro offers the same calculations, with the added benefit of being able to graphically see all Main Wind Force Resisting System (MWFRS) pressures on each surface. Seeing the pressures graphically gives the user a real advantage at being able to visualize what is physically occurring. Figure 3 shows a typical MWFRS graphic. The user can turn on/off different surfaces, change colors or rotate and manipulate the graphic just as you could in any 3D modeling package. In addition you

can toggle between Wind Direction, +/- Internal Building Pressures and Minimum wind pressures with ease.

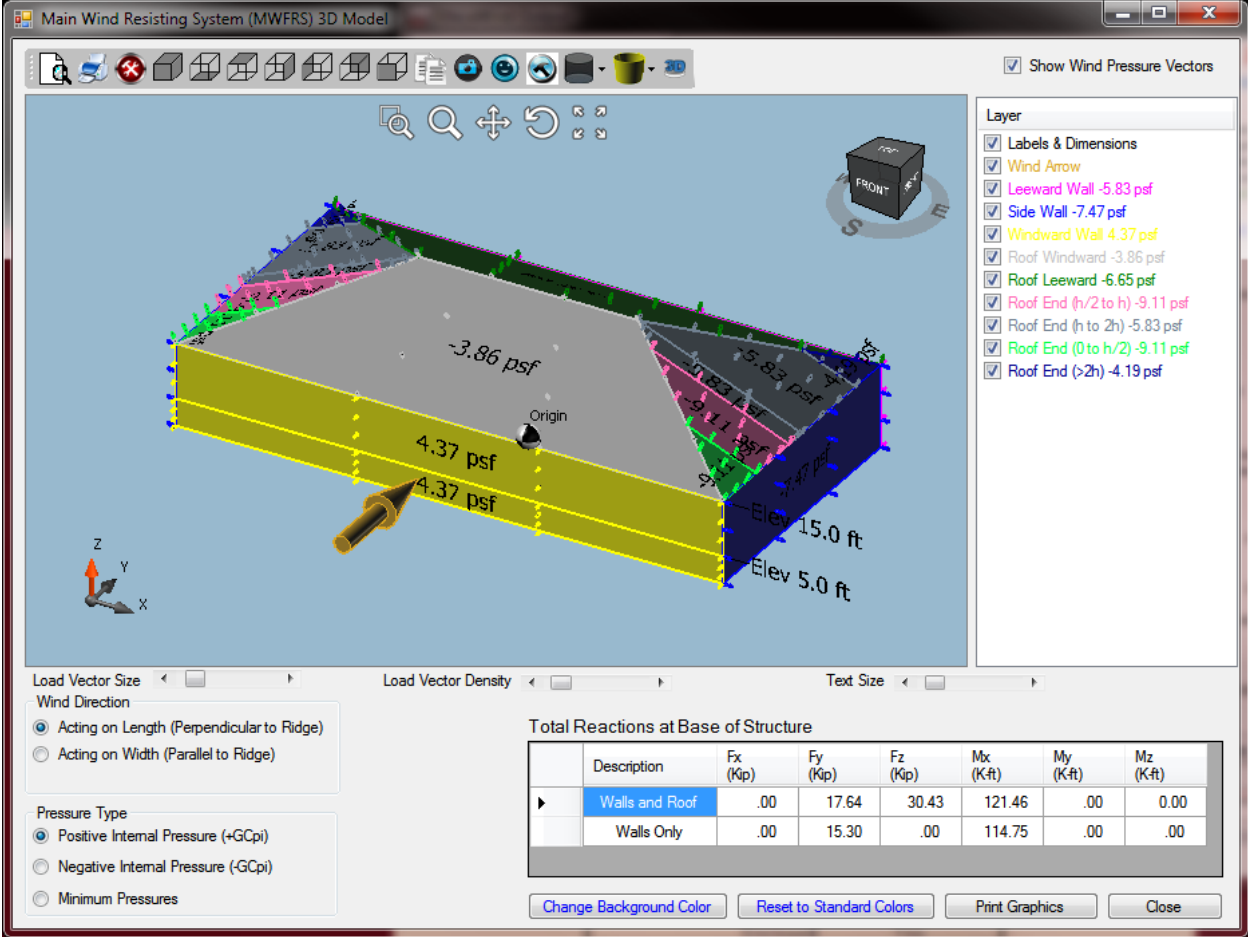


Figure 3 – MecaWind Pro MWFRS Graphic

You may then make a one (1) page report of this MWFRS Graphic with the click of a button, as shown in figure 4.

Wind Pressures - Main Wind Force Resisting System (MWFRS)

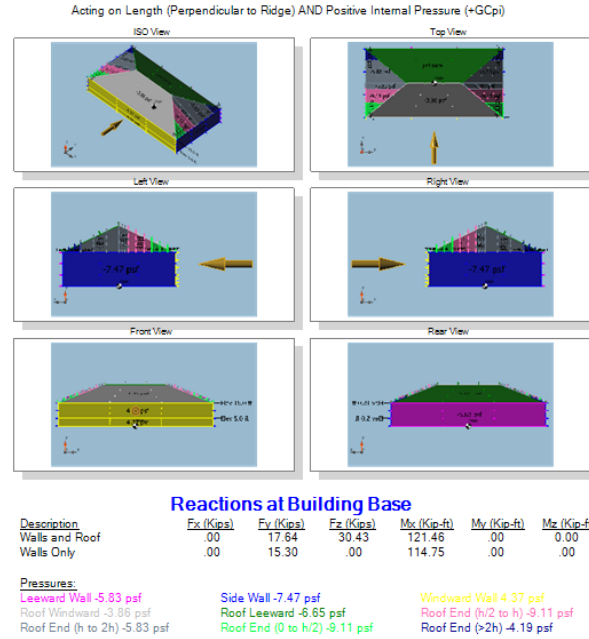


Figure 4 – MWFRS Graphic Report

MecaWind Pro also offers the ability to calculate the total reactions at the base of the structure. This is no simple calculation, given the complexity of the pressure distributions on the roof. MecaWind Pro takes all pressures into account, and gives a simple summary of the base reactions (See Figure 5).

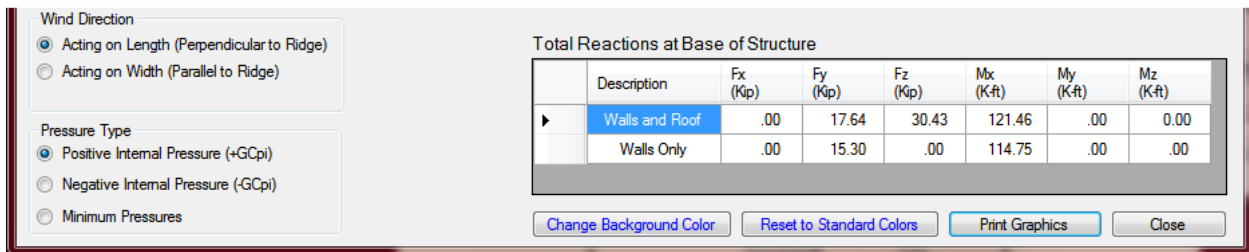


Figure 5 – Total Base Reactions

In addition, the calculation output contains a detailed breakdown of exactly how these reactions were calculated.

Normal to Ridge - Base Reactions - Walls+Roof +GCpi

Description	Press psf	Area ft^2	Fx Kip	Fy Kip	Fz Kip	Mx K-ft	My K-ft	Mz K-ft
Leeward Wall	-5.83	1500	.00	8.74	.00	65.6	.0	.0
Side Wall	-7.47	750	-5.60	.00	.00	.0	42.0	.0
Side Wall	-7.47	750	5.60	.00	.00	.0	-42.0	.0
Windward Wall	4.37	1000	.00	4.37	.00	43.7	.0	.0
Windward Wall	4.37	500	.00	2.19	.00	5.5	.0	.0
Roof Windward	-3.86	1941	.00	-3.25	6.76	16.4	.0	.0
Roof Leeward	-6.65	1941	.00	5.59	11.64	-28.2	.0	.0
Roof End (h/2 to h)	-9.11	254	0.86	-0.00	2.15	19.9	71.1	-8.0
Roof End (h/2 to h)	-9.11	254	-0.86	.00	2.15	19.9	-71.1	8.0
Roof End (h to 2h)	-5.83	142	0.31	-0.00	0.77	1.5	21.5	-0.6
Roof End (h to 2h)	-5.83	142	-0.31	.00	0.77	1.5	-21.5	0.6
Roof End (h to 2h)	-5.83	432	0.93	0.00	2.34	-19.9	76.0	7.9
Roof End (h to 2h)	-5.83	432	-0.93	.00	2.34	-19.9	-76.0	-7.9
Roof End (0 to h/2)	-9.11	71	0.24	.00	0.60	10.8	23.6	-4.3
Roof End (0 to h/2)	-9.11	71	-0.24	.00	0.60	10.8	-23.6	4.3
Roof End (>2h)	-4.19	41	0.06	.00	0.16	-3.2	6.5	1.3
Roof End (>2h)	-4.19	41	-0.06	.00	0.16	-3.2	-6.5	-1.3
Total	.00	10263	.00	17.64	30.43	121.5	.0	0.0

In addition, MecaWind Pro gives a summary of the base reactions for each case considered:

Total Base Reaction Summary

Description	Fx Kip	Fy Kip	Fz Kip	Mx K-ft	My K-ft	Mz K-ft
Normal to Ridge Walls+Roof +GCpi	.0	17.6	30.4	121.5	.0	0.0
Normal to Ridge Walls Only +GCpi	.0	15.3	.0	114.7	.0	.0
Normal to Ridge Walls+Roof -GCpi	.0	21.0	5.2	108.1	.0	0.0
Normal to Ridge Walls Only -GCpi	.0	15.3	.0	114.7	.0	.0
Normal to Ridge Walls+Roof MIN	.0	22.5	.0	277.3	.0	.0
Along Ridge Walls+Roof +GCpi	5.0	0.0	28.3	-0.0	-270.9	-0.0
Along Ridge Walls Only +GCpi	6.4	.0	.0	.0	-48.2	.0
Along Ridge Walls+Roof -GCpi	5.0	0.0	10.7	-0.0	-264.7	-0.0
Along Ridge Walls Only -GCpi	6.4	.0	.0	.0	-48.2	.0
Along Ridge Walls+Roof MIN	10.1	.0	.0	.0	-109.0	.0

MecaWind vs MecaWind PRO Comparison:

Capability	MecaWind	MecaWind Pro
Main Wind Force Resisting System (MWFRS)	Yes	Yes
Walls	Yes	Yes
Roofs	Yes	Yes
Gabled	Yes	Yes

Hipped	Yes	Yes
Monoslope	Yes	Yes
Stepped	Yes	Yes
Arched	Yes	Yes
Domed	Yes	Yes
Sawtooth	Yes	Yes
Mansard	Yes	Yes
Flat	Yes	Yes
Components & Cladding (Doors, shutters, roof, windows, etc..)	Yes	Yes
Parapets	Yes	Yes
Building Types	Yes	Yes
Enclosed	Yes	Yes
Partially Encl.	Yes	Yes
Open	Yes	Yes
Other Structures	Yes	Yes
Chimneys	Yes	Yes
Stacks	Yes	Yes
Tanks	Yes	Yes
Towers	Yes	Yes
Open Signs	Yes	Yes
Solid Signs	Yes	Yes
ASCE 7-05 Standard	Yes	Yes
ASCE 7-10 Standard	Yes	Yes
MWFRS Pressure Visualization	No	Yes
MWFRS Total Base Reaction Calculations	No	Yes

MecaWind & MecaWind Pro Licensing:

The software is leased on an annual basis. Each lease is for one (1) year, and at the end of the year the software is no longer functional unless the lease is renewed. The licensing has two options:

Single User License

This licensing is for a single user to be installed on a single computer. It can be moved to another computer in the event of a computer malfunction, but is not to be shared for more than one (1) user. In the

event that a single user has a need for a 2nd computer (i.e. Laptop), then we offer special pricing to add a license for the laptop.

Floating Network License:

This license offers the ability to share one license with an unlimited number of users. If one license is purchased, then only one will be able to run the program at a given time; however, once that person closes the software, then someone else can use it.

MecaWind Pricing:

MecaWind is available in four (4) different configurations:

Product	Single User License ⁽³⁾		Floating Network License ⁽⁴⁾	
	New Lease ⁽¹⁾	Early Renewal ⁽²⁾	New Lease ⁽¹⁾	Early Renewal ⁽²⁾
MecaWind	\$150	\$75	\$300	\$150
MecaWind Pro	\$250	\$125	\$500	\$250
Special Laptop License ⁽⁵⁾	\$20	\$20	N/A	N/A

(1) New purchase of a license.

(2) Discounted prices if lease renewed Early (Before expiration of current lease))

(3) Single User License to be used by one (1) user on one (1) computer. With the purchase of a single

(4) Floating Network can be shared by unlimited users with same company; however, only 1 user at a time for each seat purchased.

(5) With the purchase of a Single User License, the user may purchase a special "Laptop" license to be used by that same users second computer (i.e. Laptop). This license is intended for a person who needs to use the software at work and remotely, such as on a laptop, and it is only being used by that user. Using this discounted license as an attempt to get a cheaper option of adding a 2nd user will result in termination of the license without any refund.

Frequently Asked Questions (FAQ):

Can I get a fully functioning demo to try out the software?

We offer a [limited demo](#), but we do not offer a fully functioning demo.

Does the program have a help manual?

A help manual is provided with the program in the form of a pdf file. You may print the file or view it electronically.

Do I have to be connected to the internet to use the software?

It is possible to run the Single User version of the software without an internet connection; however, the floating network license does require an internet connection in order to run.

Can I share the Software with Coworkers?

The software can be shared if a floating network option is purchased. See "Floating Network Option" above for more explanation. A Single User License can only be used on a single computer.

How do I set up software on a laptop when traveling?

For a single user license, please see the "Laptop License" option in the pricing section. If a floating network option is being used, then you would need to be connected to the internet, but then you could check license in and out, just as you would on any other computer. As long as a seat is available, then you can log into the software.

Is technical support available for the software?

Yes, technical support is available. We offer a very affordable program, and we are a lean company. This means that we must handle technical support by email (support@mecaenterprises.com). We request that questions be limited to the use of the software, we can not provide interpretations as to how to apply the code to various situations. There is an option under the "Help" menu which automatically emails the input file to Meca, and you simply provide an explanation to the problem which you are experiencing.

Do I receive a CD with my purchase?

No, all software is electronically downloaded. The software is revised many times during the year, and so a CD would soon be obsolete. It is why we rely on Electronic downloads.

How quickly can I begin using the software?

Our order process is completely automated. If you purchase [online](#), you will automatically receive an email with instructions on downloading and activating the software. This information also appears on the last page of the order process. You will be using the software in minutes after purchase.

How do I extend the maintenance on the software?

You may log into our customer portal to access most of your account information, to verify your lease expiration date, and to renew your lease. All of this is done at the following link:

<https://secure.mecaenterprises.com/solo/customers/Default.aspx>

How do I determine the expiration on the maintenance for the software?

Log in to our customer portal:

<https://secure.mecaenterprises.com/solo/customers/Default.aspx>

Does it meet State Codes (FL, HI, etc..)?

Any state using ASCE 7-05 or 7-10. It's difficult to keep up with all state requirements, but as far as we know all states are now following ASCE 7. Specific states that we know reference ASCE 7 include: Florida, California, Texas, Oklahoma, North Carolina, Hawaii. (If you know other states that should be added, let us know and we will add it). Please note that we do not include any "special provisions" that might exist in local codes, we only follow ASCE 7 in the software.

What is the latest version of the ASCE 7 Standard?

The latest version is ASCE 7-10.

I'm not an Engineer, is the software going to be difficult to learn?

The software itself is fairly simple to use; however, the program follows the ASCE 7 standard, and honestly it is not always a simple standard to follow. You probably already know this, and that's why you are looking to purchase software. The ASCE 7 standard uses a lot of terminology and has a lot of notes and special exceptions. The software helps navigate through those issues, but it still requires some familiarity with the ASCE 7 standard.

Do I need a copy of the ASCE 7-05 or ASCE 7-10 standard?

We recommend that the user has a copy of the standard.

Does the program come with a tutorial?

We have some videos which can be beneficial on our youtube channel:

www.youtube.com/mecaenterprises

We also sell an EBook also purchase our EBook which is a great tool to explain wind load calculations and how to use the software to calculate wind loads. ([Link to EBook](#)).

Does the software handle oddly shaped buildings (T, L, U, etc..)?

There is not an option in the software for these buildings; however, these shapes can be handled by making multiple analysis runs of the software. There is a good example of this in the EBook that we offer ([Link to EBook](#)).

What happens when the lease expires?

When the lease expires the software will no longer be fully functional.

How do I determine the expiration on the maintenance for the software?

Go to the "Security" and the expiration date is shown near the bottom.

I don't want to lease software how much to just buy a copy?

We understand the distaste for leasing software. For years we have sold the software and maintenance each year, but the vast majorities don't purchase maintenance. Then they still contact us demanding support every time there is a problem. We can't afford to be here to answer those requests when we only sell a program every few years. In order to offer support and continue to develop and improve the program, the lease option is the best way to ensure that this would occur.