No matter what type of climate you live in, the levels of relative humidity in the air can affect the comfort of your home, as well as the proper functioning of your
heating and air conditioning units. **Managing ideal indoor humidity should be a priority** for every homeowner, especially when it comes to tailoring your heating and cooling preferences to meet your personal home needs.

Before we get into the problems and solutions of indoor humidity, let's take a look at the basics.

**What is Relative Humidity in Your Home?**

Relative humidity is the amount of water vapor present in air "expressed as a percentage of the amount needed for saturation at the same temperature." As temperatures go up or down, the capacity of the air to hold water changes.

Having the **right level of moisture** in your indoor home environment at all times will ensure that your home HVAC systems are working efficiently for you.

You may ask, "What should the humidity be in my house in the summer?"

During summer months, the average humidity should weigh in between **30-45 percent** (below the 50% mark). Winter may require lower than **40% relative humidity** to avoid condensation on your windows. By staying in the proper ranges, problems can be prevented.

In other words, the right humidity levels help your home to feel **cool in the summer and warm in the winter**.
If levels are not properly maintained, your home will not only feel very uncomfortable to live in, but you and your family may also become susceptible to respiratory disorders or chemical reactions.

Additionally, improper **humidity levels can also cause damage** to both the inside and outside of your home.

Removing unwanted moisture in your home is one of the primary functions of your home's air conditioning system. However, your air conditioning system may not be enough to remove the excess moisture that comes into your home.

The ideal temperature in your home will be specific to your family's preferences and **maintaining recommended humidity levels at different times of the year will ensure your comfort and safety.**

Let's take a look at the infographic:

**How to Manage Home Humidity Levels Through the Seasons**

The optimum humidity level in your home depends on your personal preferences, clothing, and level of physical activity.

ASHRAE* suggests a range of 45% - 55% humidity to manage health effects and illnesses.
Comfortable: 30% - 60%

Recommended: 45% - 55%

High: 55% - 80%
HOW TO MANAGE HOME HUMIDITY LEVELS THROUGH THE SEASONS

Seasonal Humidity Levels Can Affect Home Comfort

- **Summer Air** feels "sticky"
- **Winter Air** feels "dry"

What is Humidity?

https://www.centralhtg.com/blog/managing-home-humidity-for-maximum-comfort
The amount of water vapor in the air around you.

The optimum humidity level in your home depends on your personal preferences, clothing and level of physical activity.

<table>
<thead>
<tr>
<th>Comfortable</th>
<th>Recommended</th>
<th>High</th>
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<tbody>
<tr>
<td>30-60%</td>
<td>45-55%</td>
<td>55-80%</td>
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</table>

ASHRAE suggests a range of 45% - 55% humidity to manage health effects and illnesses.

How Does Humidity Change With the Seasons?
Summer Air
Warm summer air "holds" more moisture, so the humidity is higher.

Winter Air
Cold winter air contains less water, so the humidity is lower.

Extreme Humidity Levels Create Problems

Too much or too little moisture in the air can cause a variety of health threats and illnesses.

Threat of illnesses based on percent relative humidity:

<table>
<thead>
<tr>
<th>Condition</th>
</tr>
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<tbody>
<tr>
<td>Bacteria</td>
</tr>
<tr>
<td>Viruses</td>
</tr>
<tr>
<td>Fungi</td>
</tr>
<tr>
<td>Mites</td>
</tr>
<tr>
<td>Respiratory Infections</td>
</tr>
<tr>
<td>Allergic Rhinitis &amp; Asthma</td>
</tr>
<tr>
<td>Chemical Interactions</td>
</tr>
<tr>
<td>Ozone Production</td>
</tr>
</tbody>
</table>
Managing Ideal Indoor Humidity for Maximum Comfort

Optimum Relative Humidity Range: **45-55%**

**Issues Caused by High or Low Humidity**

**Low Humidity**
- Dry & Itchy Skin
- Susceptibility to Colds & Infection
- Damage to Wood Furniture & Floors

**High Humidity**
How Can You Achieve the Ideal Home Humidity Levels for All Seasons?

In the Summer

☐ Discontinue the use of humidifiers
☐ Use air conditioning to remove moisture indoors
☐ Use exhaust fans

In the Winter

☐ Use a portable room humidifier
☐ Add live houseplants
☐ Place water basins near your heating system
☐ Add a whole house humidifier

* ASHRAE is the American Society of Heating, Refrigeration and Air Conditioning Engineers

Sources: http://www.gasairconditioning.org/relative-humidity_chart.htm
http://www.ashrae.org/resources-publications/bookstore/indoor-air-quality-guide
To address problems in your home humidity levels, you may need additional equipment, such as a whole **home ventilation system or a humidification system**.

These systems are designed to increase your home comfort and decrease your risk of humidity related health issues. You can read more about the different types of humidification systems available and which might be best for your home in another blog post.

Let's back up a minute and talk more about...

**The Most Common Problems of Poor Indoor Humidity and What YOU Can do About it**

**Low Humidity Can Cause:**
- Static electricity
- Dry, itchy skin and hair
- Susceptibility to colds and respiratory illness
- Viruses and germs thrive
- Damage to wood furniture and floors, furniture split and crack
- Paint can chip
- Electronics can get damaged

Let's tackle what you can do about it...

First off, indoor air tends to get dry when there are low humidity levels outside. The cooler weather turns your heaters on which will lead to dry air inside your home.

Listening to your heater cycle on and off not only gets you worried about your heating cost but causes your sinuses to dry out among other uncomfortable side effects.
How can we fix your low humidity problem and generate your ideal indoor humidity?

How to Increase Humidity in Your Home

We found an entertaining article we think you'll enjoy. It will cost you nothing, nada, zilch for a Quick Fix to Low Humidity Levels due to Winter Heating (as long as you have a spray bottle).

Interesting result...

"Well after a full bottle of water the humidity level in the house went from 38% to 44% and that took about an hour to happen."

Can't hurt to try and see if you have similar results. Something as simple as a spray bottle can change your night sleep.

Did you know a humidifier will do wonders for improving the air in your home?

*photo credit: Air*

Even better there are 23 ways having a humidifier will improve your health and your household.

We wrote an article on that exact subject back in the spring. You can read it here. The cliff notes version, the health and household benefits are plentiful.

Here's a sample of a few on our list to get you excited:

**Health Benefits**

1. Clears your sinuses, which improves your breathing.

2. Reduces risk of infections. Viruses and bacteria do not dwell in moist air. Studies
have shown that increasing humidity levels to 43 percent or above significantly reduced the ability of airborne viruses to cause flu infections.

3. Increases healing time from infections. Humidifiers will keep your nasal passages moist.

4. Softer glowing skin. Humidifiers assist in keeping your skin moist to help prevent dry and dull skin.

5. Snoring relief. When wet air moisturizes the respiratory systems, snoring can decrease in volume and actually subside over time, due to the relaxing of the nasal passages and natural decrease in irritating particles in the air such as dust.

6. Improves sleep. Besides relief from snoring, humidity in your bedroom will help with dry throats.

7. Helps alleviate sore throats.
Household Benefits

As the heat travels through your HVAC, it spins out dry air to warm your home. This dry air can also create some problems in your household. Using a humidifier will improve, prevent, or eliminate the following:

1. Electric shocks. A humidifier can make the air a bit less dry, and thus lower the possibility of you getting shocks at home.

2. Cracked wood furnishings. Over time dry air can warp your furniture.

3. Having a humidifier in your home will protect your paintings, photos, and even your stamp collection from brittleness, discoloration, flaking, and more.

Adversely, for those of you suffering from the opposite effect high humidity in your home can witness:

- Mold growth
- Wet insulation
- Rot on woodwork
- Muggy conditions
- Sleep discomfort

Let's tackle solutions for high humidity...

How to Decrease Humidity in Your Home for Ideal Indoor Humidity

Conversely we'll talk about dehumidifiers. But we wanted to share another fun article on 19 Tips On How To Reduce Home Humidity.

Critical Cactus shares their ideas on actions you can take, moisture control through structural measures and what you should know about dehumidifying house plants.
High humidity will make your home IAQ (Indoor air quality) take a considerable effort to maintain. Use of a dehumidifier is a good way to manage the quality of air that can trigger asthma in your home.

Did you know:

Poor indoor air quality can cause or contribute to the development of infections, lung cancer and chronic lung diseases such as asthma.

1 in 12 people have asthma

You should consider investing in dehumidifiers along with routine vacuuming and change of the HVAC filters. They help regulate the moisture levels and maintain them to conditions favorable to asthmatics.

Read 3 ways in which dehumidifiers will improve your home's IAQ and help you and the members of your family with asthmatic conditions lead better lives.

Also when humidity is too high in your home you can decrease it by installing exhaust fans in your kitchen, laundry room, and/or bathrooms.

The Importance of Managing Home Humidity Levels in Different Climates

Seasonal humidity can affect indoor home comfort, so managing the humidity in your home during all seasons can make the time you spend there much more enjoyable.

https://www.centralhtg.com/blog/managing-home-humidity-for-maximum-comfort
Colder Months or Climate Are Unable to Hold Moisture

In the **winter**, or in regions that tend to be cold for most of the year, humidification, or **adding moisture**, is essential, as the colder air is unable to hold much moisture and tends to be dry.

Again if you have a humidifier, you may want to manage humidity by turning it on in the winter. An indoor humidity level of 30 - 40% is recommended in the winter months.

You can also add live houseplants for moisture or place water basins near your heating system.

Warm Temperatures or Climate Equals Too Much Moisture

During the **summer months**, or in warmer climates, removing moisture, or **dehumidification**, becomes a priority.

For climates where the air tends to be very warm and moist for most of the year, the importance of extra dehumidification - or taking moisture out of the air - can never be underestimated.

Without this addition, your home will not only become uncomfortable, but the presence of too much humidity can encourage mold and bacteria growth. A humidity level below 60% is recommended by most experts for the summer months.

*Let's face it...*

High humidity will make your home indoor air quality take a considerable effort to maintain. You can take additional precautions when it comes to maintaining your indoor air quality.
Read what is actually in the air you breathe and some easy solutions that will bring in more fresh air and improve your IAQ and reduce pesky household contaminants. We actually wrote 7 Indoor Air Quality Solutions You Can Use Today.

**Considerations for Ideal Indoor Humidity**

Where you live isn't the only factor that can affect your humidity levels. Standard home functions, such as steam produced by showering or cooking, can impact your home's humidity levels.

To keep your home feeling comfortable, especially during the winter, it is recommended to **keep the temperature of your heating units around 68 degrees F**, with relative humidity at the recommended levels above.

By installing a humidifier connected to your furnace or separate, you can monitor and control the humidity of your home all year long.

**Achieving Recommended Humidity Levels With Proper Equipment**

**Conclusion**

An **efficient air conditioning system will help** to remove unwanted moisture in your home. However, to do this, your equipment and ductwork must be sized and installed correctly.

https://www.centralhtg.com/blog/managing-home-humidity-for-maximum-comfort
 Appropriately sized systems have sufficient capacity, run times that are long enough and ample airflow to pull excess humidity out of your home. A custom-designed and installed HVAC system for your home keeps you more comfortable. It can also save you money in the process.

If dehumidifying your home a little more in the summer allows you to set the temperature on your thermostat a few degrees higher, you should notice a difference in your energy bills.

Winter may pose the opposite problem for you as your home’s humidity level may become too low. This often causes skin irritations, dried out sinuses, damage to hardwood floors and furniture and general discomfort. Regardless of whether you have a heat pump or a gas, oil, or electric furnace, a whole-house humidification system can be a good solution to help you manage your home humidity levels.

If you are concerned about managing home humidity levels in your home, consult with a trusted, professional heating and cooling expert to ensure that your systems are keeping your home environment healthy and comfortable.

Put Home Comfort in Your Hands

Download the Guide Now!
Stewart Unsdorfer

Stewart has been in the HVAC business for more than 25 years. He is a state licensed heating and A/C contractor, as well as being certified in design, fabrication, layout and installation of forced air heating / cooling systems.
Paulo 3/20/2016, 4:15:57 PM  
"During the summer months, or in warmer climates, removing moisture, or dehumidification, becomes a priority."

Sorry, it doesn't make sense to me. What about air cooler? Actually, this product is a fan and it uses a water storage to refresh the air.  
So if you are really hot in the summer, all you want is water/moist. Isn't it?

REPLY TO PAULO

Tom 12/6/2016, 5:20:05 PM

When I was a kid in the early 60s we took a month long road trip in the southwest of the US. That Chevy Impala did not have AC so dad borrowed a so-called "Texas air conditioner." Looked like a small jet engine, mounted on roof line, took in air in the front as the car moved and exhausted it into the car along the top of the window (other windows are closed). I had a water reservoir and you'd pull a cord to wet a mesh inside the tube and the dry air blowing across it would cool somewhat. If you pulled the cord really fast a spray of water would greet (and treat) the person in that seat. Wasn't that effective unless you were the lucky one in that seat!

REPLY TO TOM

Sandy 6/29/2016, 9:34:08 PM

Paulo, you must live in the desert? The key factor is keeping humidity below 60% according to this article. If you have really dry climates you can get away with the "swamp cooler". Don't try that in New England. Hope that helps

REPLY TO SANDY
Andrew Comeau  7/29/2016, 2:47:19 PM

Hello. I have a GENERALAire humidifier in my home. I have no idea what to set it to. It’s about 27 deg out and extremely humid. Any suggestions?

Blake trimarco  8/23/2016, 9:17:15 AM

I have a new home 1960 Sq ft. I think or suppose to have a 14 seer AC unit. It was replaced after a year, because it wasn't a 14 seer I found out. So I have a new one I was told it has a 3/4 hp fan up from 1/2 hp. I'm still having high electric bills, and the whole unit on top where the AC blows the air out up into the duct work is all wet. They slap another coat of that white shit on it. But still soaking wet. I keep it at 76 during the day and 74 at night. When I leave the house I set it to 78. I come home I drop it to 76, sometime it drops down in 5 to 10 min, and sometimes it the takes 1 hour I open the door where the air handler is and it's soaking wet on top. The unit is in a closet in the house. They have worked on it for a year and can't figure out what's wrong. This is a new house in the villa section all the house built are the same. Any help out there?? Thanks

K Baker  9/9/2016, 9:37:01 PM

Check the blower setting on your air handler. It may be set on low and need to be set on medium or high. Your home is also probably very humid. You can get an affordable hygrometer at Lowes to measure the humidity.
Cynthia Johnson 5/9/2017, 2:25:19 PM

Our home always has high humidity. We use a dehumidifier every day but it creeps back up to 60%+ often. We've had issues with mildew for years. Our house is over 50 years old with original Windows. Should we consider window replacements?

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