



Insight into the Industry, Featuring a Look at the Newly Released 20 SEER Equipment and Services

Presenter: Joey Land
Title: Vice President of
Finance – Sales Planning
Goodman Business Unit

Presenter: Ehren Kiker
Title: Sr. Product Manager,
Residential Outdoor Splits

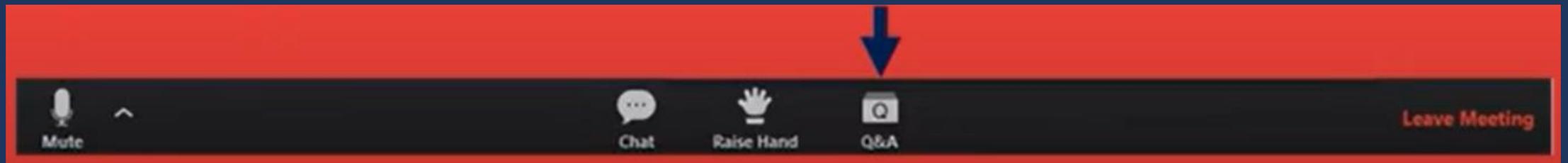
HOUSEKEEPING



Welcome to the “Insight into the Industry, Featuring a Look at the Newly Released 20 SEER Equipment and Services” Webinar

During this presentation, you are encouraged to ask questions using the Q&A feature. As you move your mouse toward the bottom of the screen, you will see the toolbar below appear.

Click on the “Q&A” icon which will then open a Q&A window on your screen.



MEETING AGENDA



- **Welcome and Introductions**
- **HVAC Industry Update**
- **Goodman 20 SEER Inverter**
- **Questions and Answers**



HVAC Industry Update

Joey Land

Vice President of Finance – Sales Planning
Goodman Business Unit

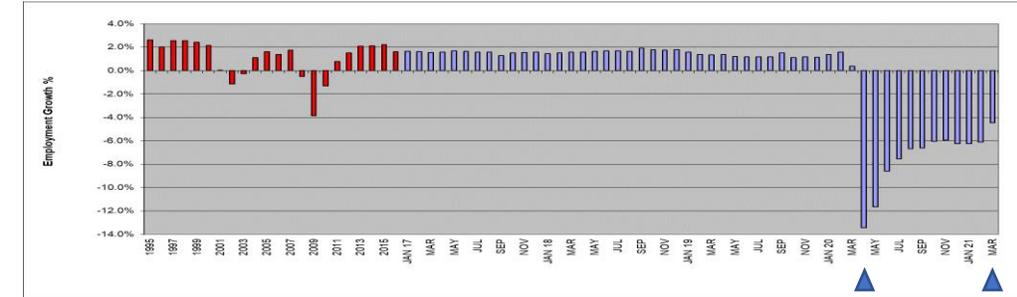
Industry Update – Residential HVAC



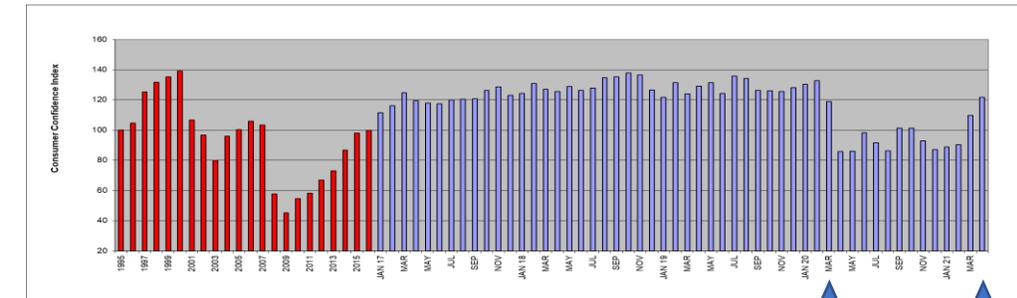
□ A Look Back at the Pandemic through 2020

- Expectations as of March / April 2020:
 - Demand, Mix, Repair vs Replace
 - Macro: Employment, Consumer Confidence
- Factory impact
 - Shutdown
 - Relaunch challenges
 - Capacity
- Hindsight – what actually happened in the industry:
 - Demand, Mix, Repair vs Replace,
 - Weather, stimulus, work from home, RNC
- Supply constraints: on-going challenges through the back half
 - Labor
 - Components

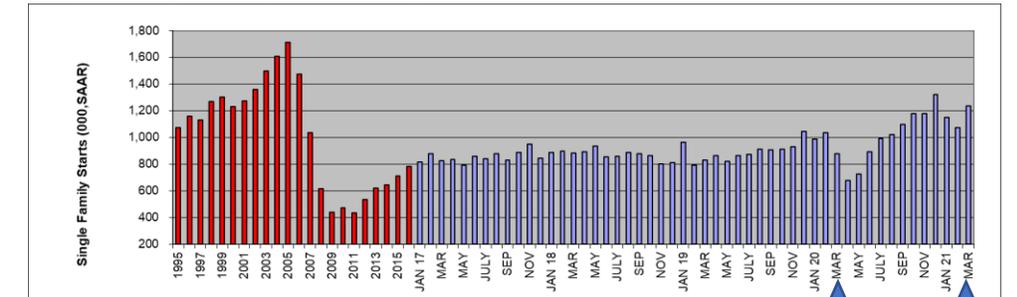
[Graph 1: Employment Growth %]



[Graph 2: Consumer Confidence Index]



[Graph 3: Single Family Home Starts]



Industry Update – Residential HVAC



☐ 2021 Outlook

➤ Demand

- Distribution behavior
- Stimulus, work from home, RNC
- Macro: Employment, Consumer Confidence

➤ Factory Update

- Volume Output (Feb, Mar, & Apr)
- On-going challenges

➤ Cost pressures:

- Commodities
- Freight
- Labor

American factories are desperate for workers. It's a \$1 trillion problem



By Matt Egan, CNN Business

Updated 3:31 PM ET, Tue May 4, 2021



Commodities

Copper jumps to record as growth bets supercharge commodities

Bloomberg / Bloomberg

May 07, 2021 17:45 pm +08



MARKETS NOW

Steel prices have tripled. Now Bank of America is sounding the alarm



By Matt Egan, CNN Business

Updated 2:40 PM ET, Thu May 6, 2021

Commodity Graphs



	FY20	Spot 5/10	FY21 Analyst	Market Conditions
COPPER	\$3.12/lb.	\$4.86/lb.	\$4.40/lb. (BOA) \$3.66/lb. (JPM) \$3.92/lb. (IHS)	<ul style="list-style-type: none"> Copper hit an all time high of \$4.86/lb. Investor interest in copper continues to grow significantly We expect a deficit for 2021 A second COVID-19 wave in LATAM leads to concentrate supply disruptions, tightening the market Strong China demand

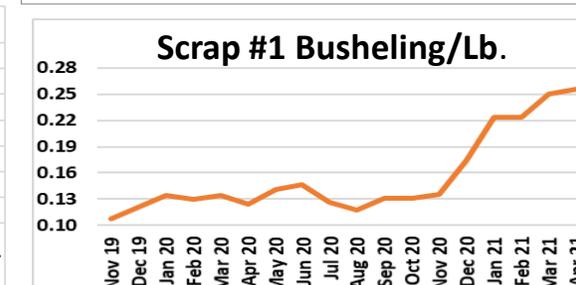
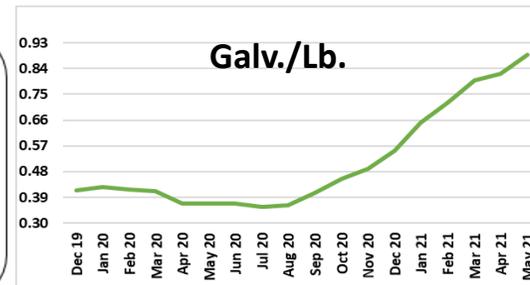
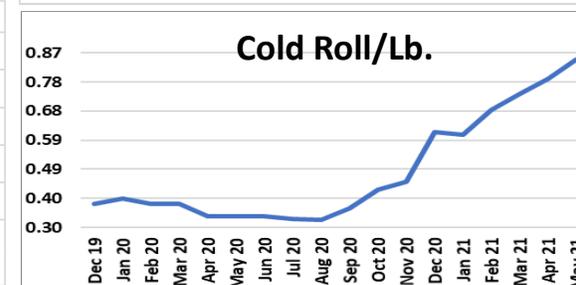
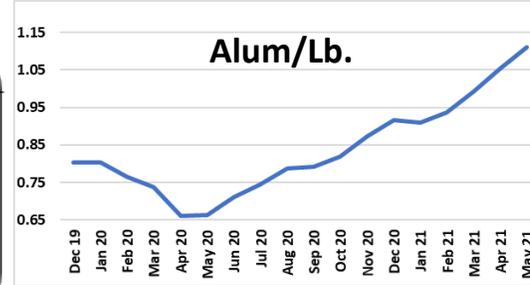
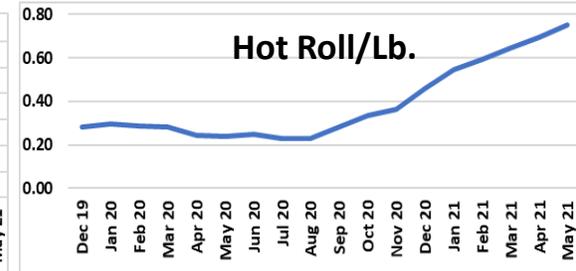
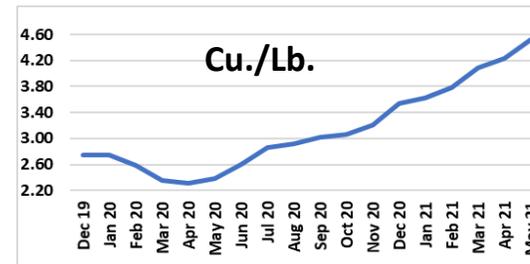
WHAT TO WATCH: **Downside:** Global demand slows sharply into H2 and remains through next year
Upside: Strong restocking through the supply chain on improved confidence; Continued production disruptions in coming quarters

ALUMINUM	\$0.82/lb.	\$1.16/lb.	\$1.16/lb. (BOA) \$0.92/lb. (JPM) \$0.97/lb. (IHS) \$0.95/lb. (Harbor)	<ul style="list-style-type: none"> LME Aluminum hit a 3 year high of \$1.16/lb. China's aluminum prices rising by 3.3% w/w as supply side concerns continue to support speculative buying Trading companies are holding excess aluminum driving up prices Midwest premium hit an all-time high of \$0.26-\$0.27/lb.
-----------------	------------	------------	---	---

WHAT TO WATCH: **Downside:** Amid a broader shift from spending on goods to services, demand comes in weaker than expected as restocking falters
Upside: Chinese demand growth continues to surprise to the upside over 2H21 as credit tightening is less impactful than expected.

STEEL	\$0.49/lb.	\$0.91/lb (Galv) \$0.75/lb (HR)	\$0.84/lb. (IHS) \$0.62/lb. (Credit Suisse)	<ul style="list-style-type: none"> Hot-rolled steel prices reached an all time-high of \$0.75, Galvanized steel at \$0.91/lb. Steel demand will trend roughly sideways from late 2020 across 2021
--------------	------------	------------------------------------	--	---

WHAT TO WATCH: **Downside:** New electric furnace capacity is starting to come online in the US, and more will be added in 2021 and 2022
Upside: Global steel supply remains extremely tight



On the horizon: freight industry outlook



All major agencies that monitor the transportation market are forecasting shortages first half 2021

Factors influencing supply:

Driver availability – it's a labor shortage not a truck/trailer shortage

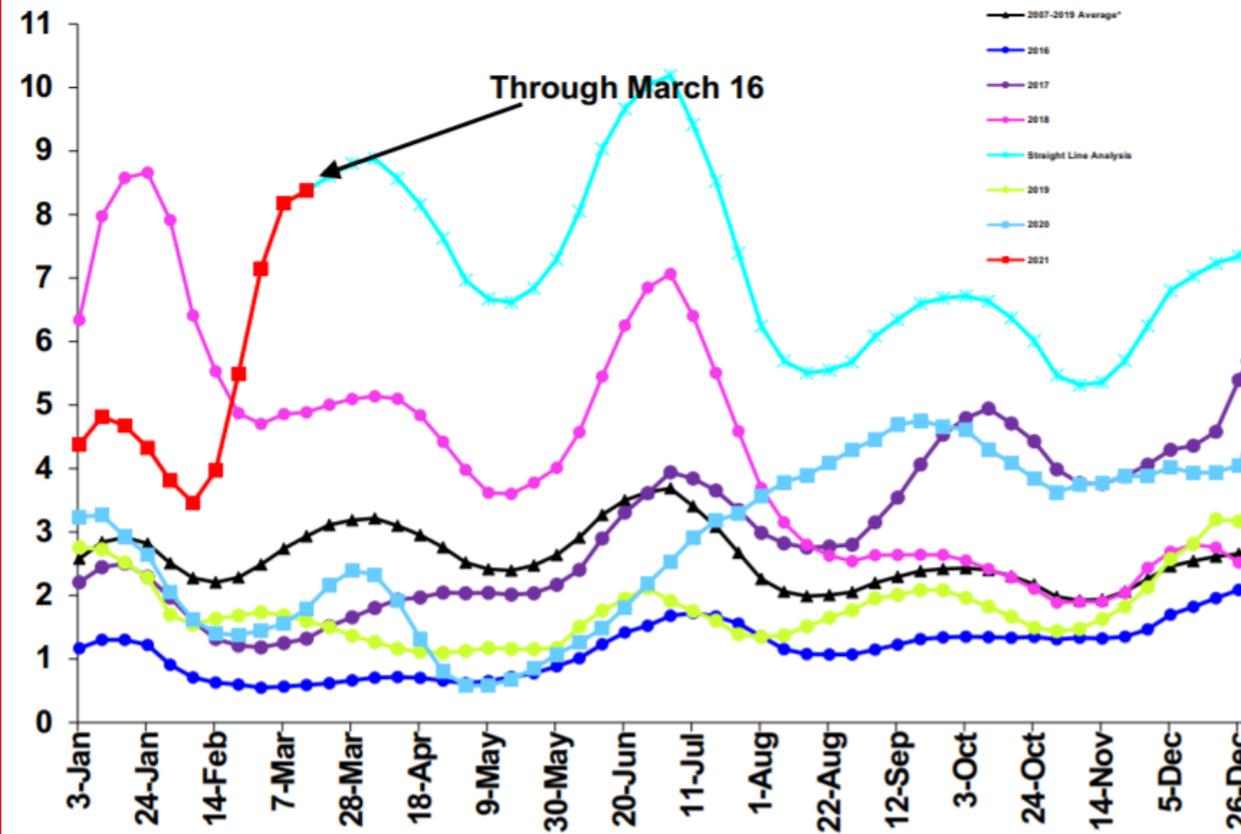
Driver demographics continues to get worse, retirees not being replaced, driving a truck is not an attractive job
Truck driving schools closed due to COVID-19

New national drug/alcohol clearinghouse data has prevented drivers who fail a drug test from re-entering the market with another company.

Factors influencing demand:

U.S. port congestion is disrupting flow of freight and creating market imbalances
Sheer volume of available loads is up significantly since summer of 2020, and still increasing.

Exhibit 2: Morgan Stanley Dry Van ONLY Truckload Freight Index



Source: Morgan Stanley Research. The index measures the demand for Dry-Van Truckload services compared to the supply. When a given reading is above prior years' level, it means there is more freight demand relative to available capacity. When a given reading is below prior years' level, it means there is less freight demand relative to capacity. *2007-2019 average trend line excludes financial crisis years of 2008 and 2009 and 2020 since it did not follow normal seasonality

Morgan Stanley:

Morgan Stanley's outlook shows 2021 demand for truckload forecasted to **greatly exceed 2018** (the purple line) – which was the tightest capacity year on record and one in which freight costs increased dramatically.

2021 impact is primarily volume-driven, as the shortage of drivers was a long-term existing problem made worse by the higher volume of freight as the economy reopens.

Industry Update – Residential HVAC



2021 Outlook Continued

➤ Supply constraints:

- Equipment
- Parts, Supplies, & Accessories

➤ A look beyond:

- 2021 Improvement Actions
- Current Goodman/BuyMax initiatives
 - Integration with successware
 - Training,
 - Support,
 - Collaboration
- 2023 Regulatory Changes



3" Traveler Label Mid 2021

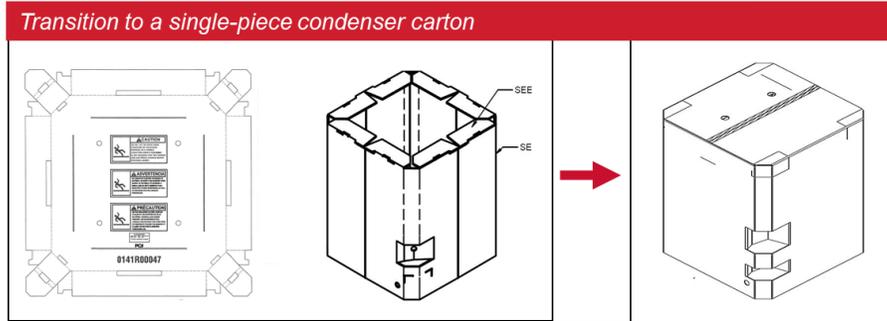


5" label wrinkling issues



3" label to reduce wrinkling

Figure 1: Future 3" travel label design





Goodman 20 SEER Inverter

Ehren Kiker

Sr, Product Manager,
Residential Outdoor Splits

New Goodman 20 SEER AC/HP Model Families

<u>AC Models:</u>	<u>HP Models:</u>	<u>Tonnage:</u>
• GVXC200241	GVZC200241	2
• GVXC200361	GVZC200361	3
• GVXC200481	GVZC200481	4
• GVXC200601	GVZC200601	5

- Product Features:
- Swing compressors & scroll compressors for inverters
- Premium sound blanket
- “Boost Mode” setting
- ComfortBridge Technology compatible
- Filter drier provided
- SmartShift defrost control
- Energy Star on specific AC & HP systems





Dealer Inverter Benefits

- **NO LOCKED ROTOR AMPS** and very low start-up amps
- **QUIET COMPRESSOR START-UP** and fewer start/stop cycles
- **LONGER RUN PERIODS** at **LOWER CAPACITIES** compared to single-stage/two-stage systems
- **REDUCED ENERGY USAGE** during peak conditions
- **HIGH EFFICIENCY** in partial-load conditions
- **GREAT HEATING PERFORMANCE** in heat pump models
- **INCREASED COMPRESSOR SPEED** during cold ambient conditions
- **SAME HEAT OUTPUT** as systems utilizing heat strips, without using extra energy
- **BUNDLING OPPORTUNITIES** such as ComfortBridge Technology, IAQ products and ESAs

- **HAPPY HOMEOWNER → MORE REFERRALS → BUSINESS GROWTH & PROFITS!!**



New Goodman AC/HP Product Lineup

VS Inverter AC & Heat Pump

- 20 SEER



2-Stage AC & Heat Pump

- 18 SEER
- 16 SEER



1-Stage AC & Heat Pump

- 16 SEER
- 14 SEER
- 13 SEER*
(*AC only)



Easy to sell



Easy to install



Easy to service

10 YEAR REPLACEMENT LIMITED WARRANTY*

LIFETIME COMPRESSOR LIMITED WARRANTY*

10 YEAR PARTS LIMITED WARRANTY*

10 YEAR REPLACEMENT LIMITED WARRANTY*

LIFETIME COMPRESSOR LIMITED WARRANTY*

10 YEAR PARTS LIMITED WARRANTY*

2 YEAR REPLACEMENT LIMITED WARRANTY*

10 YEAR PARTS LIMITED WARRANTY*





Customer Satisfaction Priority #1

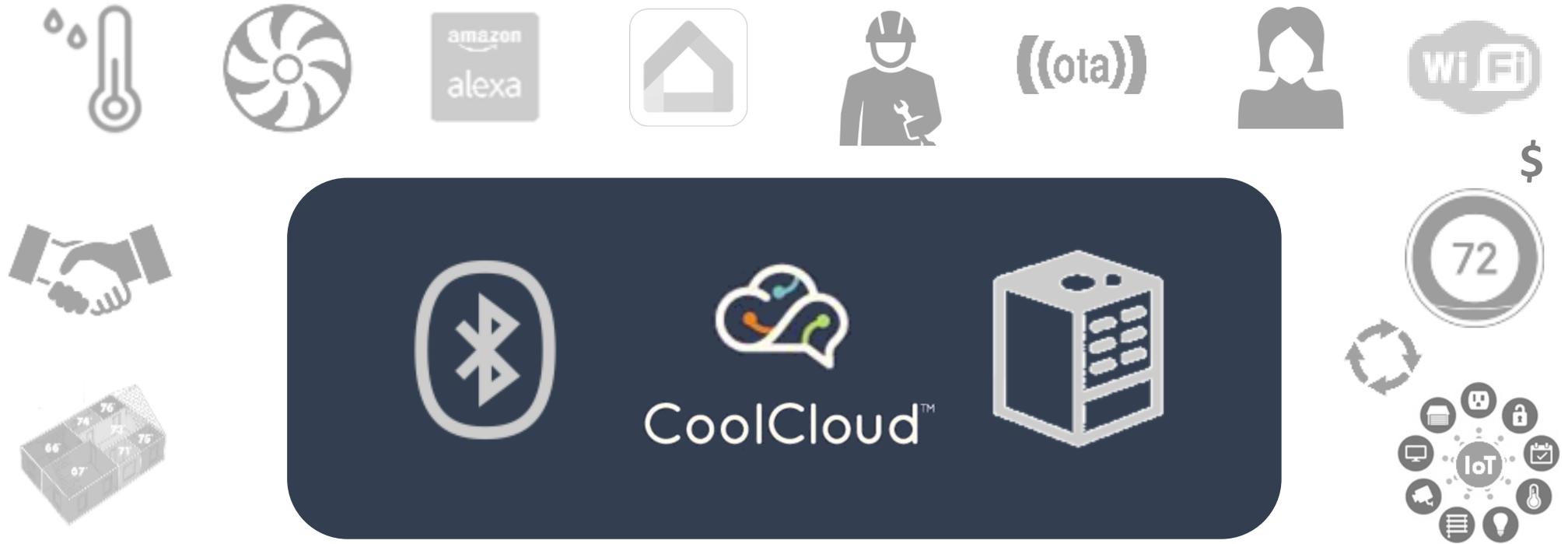
- More Comfort
 - More Humidity Control
 - More Even Temperatures Throughout the Space
 - More Consistent Temperatures Through out the day
 - Reduced Noise
- More Energy Savings
 - Reduced Energy Consumption for BTUs produced (Higher SEER, EER)
 - Delivering BTUs more efficiently
 - Stronger Latent Heat Capacity
 - Easier Start and Stop
- More Life
 - Daikin Swing Compressor Has been in Service 30+ Years
 - Less Starting and Stopping
 - Advanced System Diagnostics through Comfort Bridge and Cool Cloud
 - Advanced System Protection Components



PILLAR 1: INVENTORY

- Product available when you need it, where you need it
- Inverter units produced at DTTP facility in Houston on dedicated assembly line
- Inventory shipped to distributor branches and regional distribution hubs to better serve regional markets
- Product team working with Logistics to make sure that other critical system components (coils, air handlers, furnaces) are available in regional markets as well
- Production is ready to take stock orders from distributors or dealers. Please contact your Goodman Sales professional for help placing a stock order.

ComfortBridge™ technology



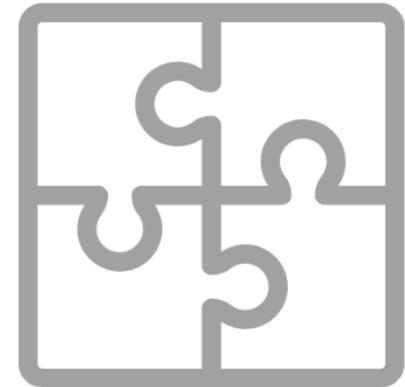
New Control Arrangements



Thermostat
You choose the control.



Accessories
No limitations to what can be connected.



Zoning
Your choice is our choice.

Goodman Inverter ComfortBridge Lineup



**G(M/C)VC(96/80)
2 Stage Furnaces**



**G(M/C)VM97
Modulating
Furnaces**

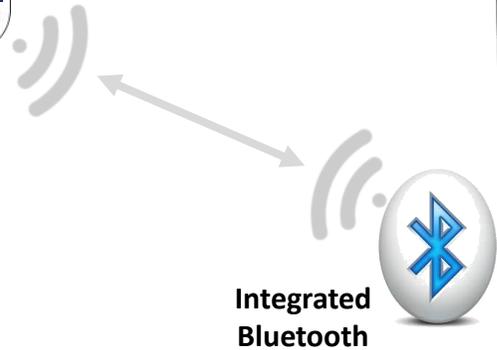


MBVC



**AVPEC
(Launching
July 2021)**

CoolCloud App



2-wire comm. link



**DOWNLOAD OUR
FREE APP**



Pillar 2: Training



Omni Device, OnDemand Training

Learn in a hands-on environment



GOODMAN BUSINESS TOOLBOX

Make your selection from the options below to get started:

- DEALER**
Training Tools & Resources for Dealers
- DISTRIBUTOR**
Training Tools & Resources for Distributors
- TSM**
Training Tools & Resources for TSM

Training Tools & Resources for Dealers

The Goodman Business Toolbox was created to deliver world class tools and training to help Goodman dealers grow profitable and sustainable businesses. Registration for the Goodman Business Toolbox events is now available by clicking on the "Training Schedule & Register" link.

VIEW TRAINING SCHEDULE & REGISTER	PROGRAM BROCHURE	CURRICULUM
TEAM OF EDUCATORS	TRAINING RESOURCES	STRATEGIC ALLIANCE PARTNERSHIPS

OnDemand, Omni-Device Training
Powered by Interplay Learning

[INTERPLAY LEARNING](#)

[DOWNLOAD APP](#)

CLEAN COMFORT[®]

INDOOR AIR ESSENTIALS

Bypass-less Zoning System

PURE. CLEAN. AIR.

FILTRATION



HUMIDITY CONTROL



DEHUMIDIFICATION



PURIFICATION



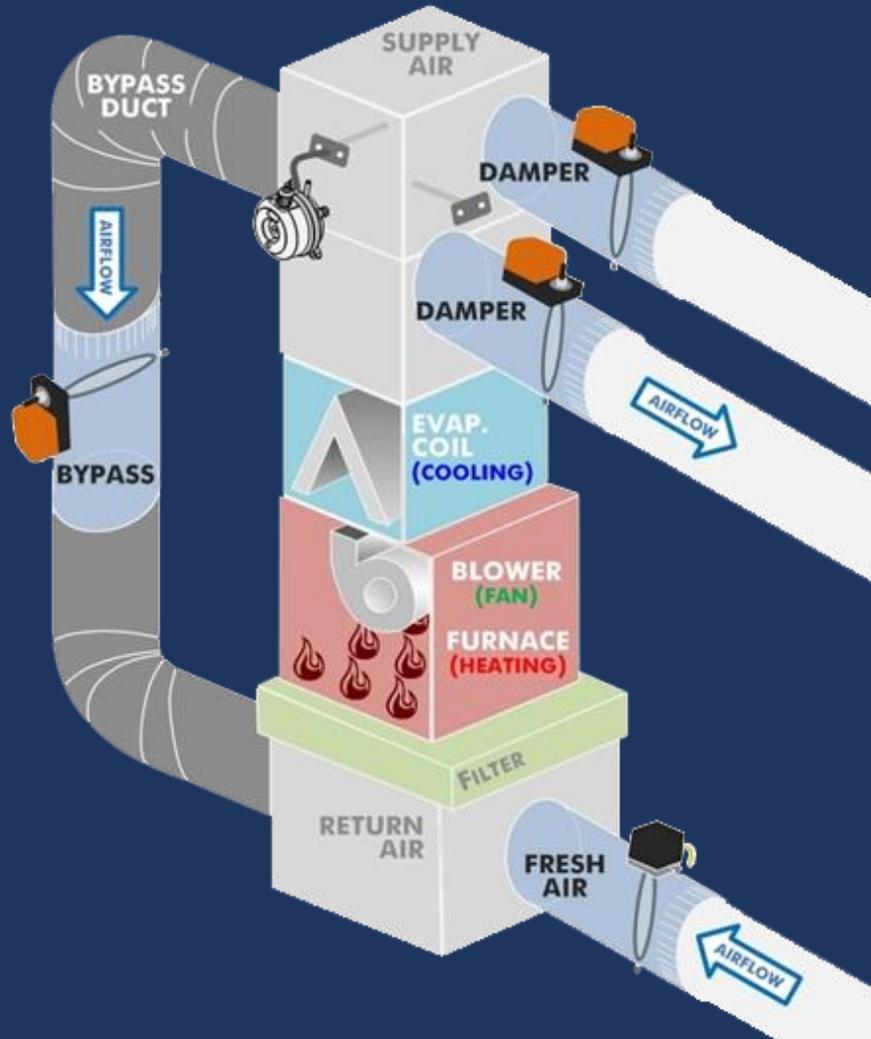
VENTILATION



ZONING



Zoning Dampers and Ducting

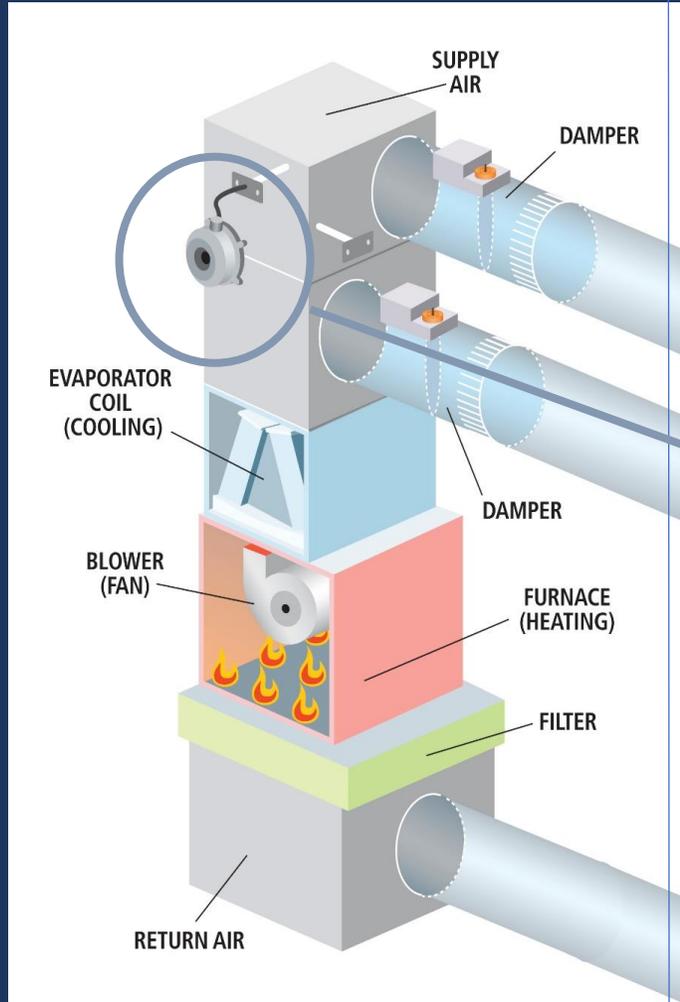


Static Pressure

Traditional Bypass



Clean Comfort Bypassless Zoning



- Clean Comfort zoning employs a static pressure sensor
 - That along with power-open, power-close dampers uses artificial intelligence to bleed-off excess air to idle zones



NEW!

Bypass-Less Clean Comfort Zone Control Kits

- 2, 3, and 6 zone panels
- All components included
 - Static pressure sensor
 - High / low temperature sensor
 - Transformer
- 10-year panel warranty
- 5-year damper warranty
- Belimo damper hardware
 - Power open / power close
 - Full modulation
- 6 – 16" round sizes stocked
- Virtually any size available



NEW!

BUY
MAX

Goodman
Air Conditioning & Heating

Economy Clean Comfort Zone Control Kits

- 2, 3, and 6 zone panels
- All components included
 - High / low temperature sensor
 - Transformer
- 5-year panel warranty
- 5-year damper warranty
- Belimo damper hardware
 - Power close / Spring open
- 6 – 16" round sizes stocked
- Virtually any size available
 - Round and Rectangular
- Direct Competitor for EWC, Honeywell, and Aprilaire.





Thank You

For More Information: Please reach out to support@4buymax.com or contact Goodman directly by emailing Beverly Childress at beverly.childress@goodmanmfg.com or via phone at (931) 625-2118.