



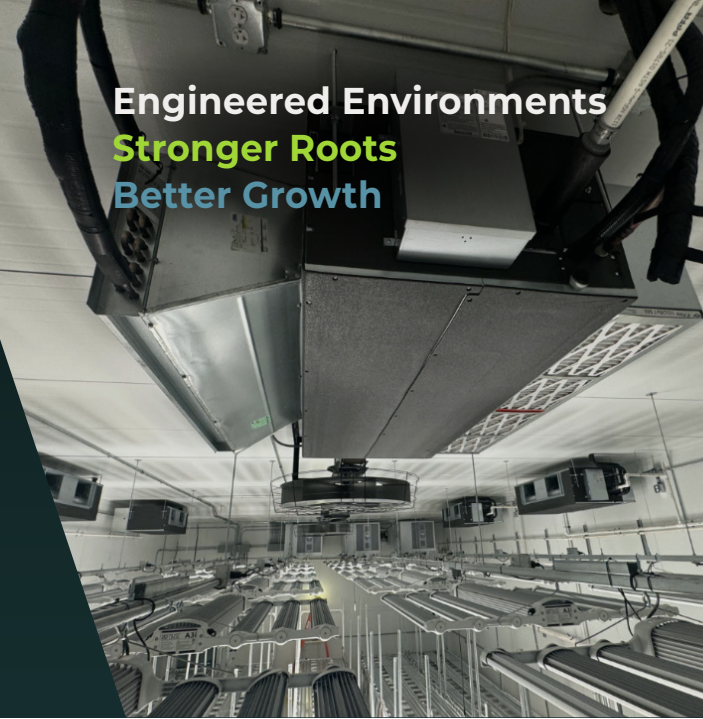
EASYROOTS
ENGINEERED ENVIRONMENTS

ADVANCED

VRF HOT GAS REHEAT DEHUMIDIFICATION

**Precise Humidity Control
Without the Energy Penalty**

Maintain ideal grow room temperatures while removing excess moisture through a highly efficient VRF-based hot gas reheat system designed specifically for cultivation environments.



**Engineered Environments
Stronger Roots
Better Growth**

THE CHALLENGE

**Traditional Dehumidification Creates
Expensive Tradeoffs**

Cultivators are constantly balancing:



Humidity Removal



Temperature Control



Energy Consumption



Operating Costs

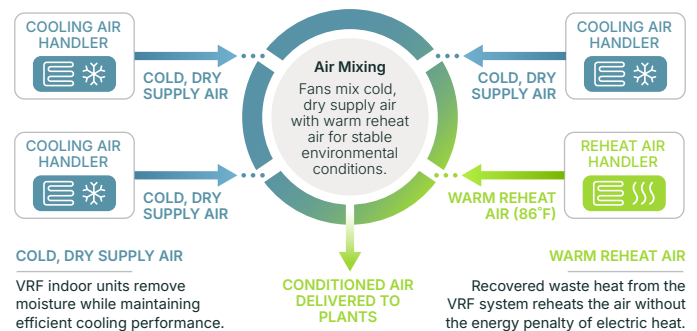
Traditional dehumidification systems often overcool spaces and rely on electric reheat to bring temperatures back up, increasing electrical demand and operating costs.

HOW IT WORKS

**Cold, Dry Air + Warm Reheat Air + Air Mixing =
Stable Environmental Control**

EasyRoots recovers waste heat already generated by the grow lights and uses it to reheat air after moisture removal. Combined with strategic air mixing, this creates a more stable growing environment while reducing energy consumption.

PRECISION CLIMATE CONTROL. MAXIMUM EFFICIENCY



PROOF & PERFORMANCE



UP TO

70%-80%

**Lower Cooling &
Dehumidification Costs***



**IMPROVE
ENVIRONMENTAL
CONTROL**



**LOWER
ELECTRICAL
DEMAND**



**REDUCE
ENERGY USE**

Our systems are designed to reduce energy consumption, simplify facility infrastructure, and create long-term operational savings.

* Results vary based on project type, climate conditions, and system configuration.



The EasyRoots Difference

Unlike traditional electric reheat systems, Easy Roots combines VRF technology, recovered waste heat, and integrated air mixing strategies into a complete environmental control solution designed specifically for cultivation facilities.

**Smarter Systems.
Lower Costs.
Better Growing
Environments.**

VRF HOT GAS REHEAT DEHUMIDIFICATION

Environmental Control Designed for Modern Cultivation



KEY BENEFITS



Lower Operating Costs

Recover waste heat instead of generating new heat through electric resistance.



Precise Environmental Control

Maintain target humidity and temperature simultaneously.



Reduced Electrical Demand

Lower infrastructure requirements can reduce upfront facility costs.



Built Specifically for Cultivation

Designed around real-world grow room and greenhouse environmental requirements.

"THE MAGIC BOX"

8-Port Recovery Box



- Routes refrigerant throughout the VRF network
- Contains on board control logic
- Directs heat recovery operations
- Enables intelligent temperature and humidity management

SYSTEM COMPONENTS



VRF
INDOOR UNIT



HEAT
RECOVERY BOX



RECOIL
HEAT



INTEGRATED
CONTROLS



AIR MIXING
STRATEGY

APPLICATIONS



Flower Rooms

Precision climate control for optimal flower development.



Greenhouses

Environmental control for year-round high-performance cultivation.



Controlled Environment Agriculture (CEA)

Advanced systems for consistent, scalable growing-indoors and beyond.

SYSTEM OVERVIEW

	Capacity Range	3-32 Tons
	Airflow Range	1,000-7,000+ CFM
	Voltage	208/230V-3PH-60HZ
	Controls	Integrated Microprocessor
	Communication	BACNET Compatible
	Refrigerant	R32
	Installation	Ceiling Mounted
	Application	Indoor Grow Rooms & Greenhouses



EASYROOTS
ENGINEERED ENVIRONMENTS



EasyRoots.com



833-EASYBUD (833-237-9283)



Sales@EasyRoots.com



@easyroots

VRF HOT GAS REHEAT DEHUMIDIFICATION

Environmental Control Designed for Modern Cultivation



TECHNICAL SPECIFICATIONS

8 Ton Unit | 2542 CFM - High Fan Speed

Temp	Leaving Air Temp	Starting Humidity	lb/hr removal	PPD
85	66.9	65	44.3	1019
80	60.9	65	42.1	969
75	55.8	65	28.4	883
70	52.6	65	33.2	764
80	59.4	60	39.3	904
75	55.5	60	31.5	725
70	51.8	60	24.3	559
65	49.2	60	15.5	357
60	46.4	60	7.6	175
80	57.9	55	35.1	808
75	55.5	55	23.6	543
70	51.3	55	19	437
65	48.8	55	9.6	221
80	56.6	50	30.1	693
75	54.1	50	20	460
70	50.9	50	11.5	265
65	48.5	50	5.3	122
60	45.8	50	0.4	9

8 Ton Unit | 2260 CFM - Low Fan Speed

Temp	Leaving Air Temp	Starting Humidity	lb/hr removal	PPD
85	66.5	65	46.7	1074
80	60.6	65	39.3	904
75	55.6	65	34.7	798
70	52.4	65	26	598
80	59.1	60	35.8	824
75	55.3	60	28.5	656
70	51.6	60	22.1	508
65	49.1	60	14	322
60	46.3	60	7.8	179
80	57.6	55	32.1	739
75	55.3	55	21.6	497
70	51.2	55	17.2	396
65	48.7	55	9.9	228
80	56.4	50	27.3	628
75	53.9	50	18.3	421
70	50.8	50	12.2	281
65	48.3	50	5.8	133
60	45.7	50	0.6	14

6 Ton Unit | 2260 CFM - High Fan Speed

Temp	Leaving Air Temp	Starting Humidity	lb/hr removal	PPD
85	68.8	65	31.6	727
80	62.9	65	31.5	725
75	57.8	65	28.3	651
70	54.4	65	20.6	474
80	61.5	60	28.2	649
75	57.5	60	22.2	511
70	53.7	60	16.7	384
65	50.8	60	9.8	225
60	47.8	60	4.4	101
80	60.2	55	24.3	559
75	57.5	55	19.6	451
70	53.3	55	11.8	271
65	50.5	55	5.5	127
80	59	50	19.9	458
75	56.3	50	11.8	271
70	52.9	50	6.9	159
65	50.1	50	1.5	35
60	47.2	50	0	0

6 Ton Unit | 1766 CFM - Low Fan Speed

Temp	Leaving Air Temp	Starting Humidity	lb/hr removal	PPD
85	68	65	27.3	628
80	62.2	65	26.5	610
75	57.3	65	23.3	536
70	54	65	17	391
80	60.9	60	23.6	543
75	57	60	18.5	426
70	53.3	60	13.9	320
65	50.5	60	8.3	191
60	47.6	60	3.8	87
80	59.5	55	20.7	476
75	57	55	13.1	301
70	52.9	55	10	230
65	50.2	55	4.9	113
80	58.5	50	16.7	384
75	55.8	50	10.3	237
70	52.5	50	6.2	143
65	49.8	50	1.7	39
60	47	50	0	0

VRF HOT GAS REHEAT DEHUMIDIFICATION

Environmental Control Designed for Modern Cultivation



TECHNICAL SPECIFICATIONS

4.5 Ton Unit - ZRNU543B8AA | 2260 CFM - High Fan Speed

Temp	Leaving Air Temp	Starting Humidity	lb/hr removal	PPD
85	73.6	65	8.6	198
80	67.9	65	11.6	267
75	62.9	65	10.8	248
70	59	65	6.4	147
80	66.9	60	7.7	177
75	62.6	60	5	115
70	58.5	60	2.1	48
65	55	60	0	0
60	51.5	60	0	0
80	66	55	3.3	76
75	62.7	55	0	0
70	58.2	55	0	0
65	54.2	55	0	0
80	65.2	50	0	0
75	61.8	50	0	0
70	57.9	50	0	0
65	54.6	50	0	0
60	51.1	50	0	0

4.5 Ton Unit - ZRNU543B8AA | 1766 CFM - Low Fan Speed

Temp	Leaving Air Temp	Starting Humidity	lb/hr removal	PPD
85	72.8	65	10	230
80	67.2	65	11.4	262
75	62.2	65	10.5	242
70	58.5	65	6.3	145
80	66.2	60	8.3	191
75	62	60	5.6	129
70	57.9	60	3.2	74
65	54.6	60	0	0
60	51.1	60	0	0
80	65.3	55	4.8	110
75	62	55	0.2	5
70	57.7	55	0	0
65	54.3	55	0	0
80	64.5	50	0.8	18
75	61.1	50	0	0
70	57.4	50	0	0
65	54.1	50	0	0
60	50.7	50	0	0

3 Ton Unit - ZRNU363B8AA | 1730 CFM - High Fan Speed

Temp	Leaving Air Temp	Starting Humidity	lb/hr removal	PPD
85	74.8	65	1.6	37
80	69.2	65	4.4	101
75	64.2	65	4.4	101
70	60.2	65	1.6	37
80	68.3	60	1.2	28
75	64	60	0	0
70	59.6	60	0	0
65	56	60	0	0
60	52.3	60	0	0
80	67.4	55	0	0
75	64	55	0	0
70	59.4	55	0	0
65	55.8	55	0	0
80	66.6	50	0	0
75	63.1	50	0	0
70	59.1	50	0	0
65	55.6	50	0	0
60	52	50	0	0

3 Ton Unit - ZRNU363B8AA | 1066 CFM - Low Fan Speed

Temp	Leaving Air Temp	Starting Humidity	lb/hr removal	PPD
85	73.3	65	4.8	110
80	67.9	65	5.5	127
75	63	65	4.9	113
70	59.2	65	2.7	62
80	66.9	60	3.7	85
75	62.8	60	2	46
70	58.7	60	0.7	16
65	55.2	60	0	0
60	51.7	60	0	0
80	66.1	55	1.4	32
75	62.8	55	0	0
70	58.4	55	0	0
65	55	55	0	0
80	65.3	50	0	0
75	61.9	50	0	0
70	58.1	50	0	0
65	54.8	50	0	0
60	51.3	50	0	0

VRF HOT GAS REHEAT DEHUMIDIFICATION

Environmental Control Designed for Modern Cultivation



TECHNICAL SPECIFICATIONS

3 Ton Unit - ZRNU363M2AA - Mid Static
922 CFM - High Fan Speed

Temp	Leaving Air Temp	Starting Humidity	lb/hr removal	PPD
85	66.9	65	16.1	370
80	60.9	65	15.6	359
75	55.7	65	14	322
70	52.6	65	10.4	239
80	59.2	60	14.5	334
75	55.4	60	11.5	265
70	51.6	60	9	207
65	49	60	5.8	133
60	46.3	60	3.2	74
80	57.5	55	13.2	304
75	55.4	55	8.7	200
70	51	55	7.2	166
65	48.6	55	4.1	94
80	56.1	50	11.5	265
75	53.8	50	7.6	175
70	50.5	50	5.3	122
65	48.1	50	2.3	58
60	45.5	50	0.4	9

3 Ton Unit - ZRNU363M2AA- Mid Static
643 CFM - Low Fan Speed

Temp	Leaving Air Temp	Starting Humidity	lb/hr removal	PPD
85	65.6	65	12.6	290
80	59.8	65	11.9	274
75	54.9	65	10.4	239
70	52	65	7.7	177
80	58.2	60	11	253
75	54.6	60	8.6	198
70	51	60	6.7	154
65	48.6	60	4.3	99
60	46	60	2.4	55
80	56.6	55	9.9	228
75	54.7	55	6.6	152
70	50.5	55	5.4	124
65	48.2	55	3.1	71
80	55.3	50	8.6	198
75	53.1	50	5.8	133
70	50	50	4	92
65	47.8	50	0.5	12
60	45.3	50	0.4	9

System Sizes

6 Ton
8 Ton
12 Ton
14 Ton
16 Ton
18 Ton
20 Ton
22 Ton

Outdoor Unit

Weights &
Dimensions
Vary by Size

Indoor Unit

Weights &
Dimensions
Vary by Size

Contact Us

Contact Us for
System Sizing for
your Grow
Facility's HVAC
and
Dehumidification
Requirements.

