



Parts & Service



## **Dehumidification Formula**

The following formula is for starting conditions only and should be modified as psychrometric conditions dictate.

<b>STEP 1</b> Determine the cubic footage (ft <sup>3</sup> ) of the environment to be dried. L x W x H (10 x 20 x 8 = 1600 ft <sup>3</sup> )		LXW	/ X H =		
STEP 2 Determine which class (rates) of evaporation Class: 1. No carpet & pad 2. With carpet & pad 3. Water from above; wet walls >24" high 4. Specialty/Bound water	CLASS	<b>1</b> Slow	<b>2</b> Fast	<b>3</b> Fastest	<b>4</b> Bound Water
	Conventional Refrigerant	100	40	30	N/A
STEP 3 Choose the dehumidifier(s) to be used All Gap Power Dehumdifiers are the LGR refrigerant type	LGR Refrigerant	100	50	40	50
	Desiccant	1	2	3	2
STEP 4 Do the Math	Conventional and LGR:   Step 1: (cft) + Step 2: (class factor) =AHAM Pints needed minimum   Step 3: AHAM Pints needed + Dehu AHAM Rating = # of Dehus needed   Desiccant:   Step 1: (cft) + Step 2: (class factor) = (Total) + 60 = CFM   needed   Step 3: CFM needed + Dehu CFM Rating = # of Dehus needed				
<b>Example</b> Illustration is Class 3	<b>LGR Refrigerant:</b> 1600 cft ÷ 50 = <b>32 AHAM Pints</b> needed minimum to start the job (i.e. one LGR Evolution (DEH17) at 70 Pint capacity would be plenty) (Use fans to circulate air and push moisture into air so dehumidifier can remove it)				

Dehumidifiers Water Removal Ratings				
Dehumidifier	AHAM Rating (80°/60%RH/24	CFM		
	hours)			
LGR Evolution	70 PT (8.75 gal)/Day (33 L)	160		
LGR 7000	130 PT (16.25 gal ) /Day (61L)	325		

Credit for chart: www.countryrestoration.com (Battle Ground, WA) 360-546-3259