TRENDS IN FM RELATED TO RECRUITING TECHNICIANS AND FM LEADERS
QUANTIFYING THE “SKILLS GAP”
Notable Challenges (US National Statistics)

✓ Low US unemployment rate ~5%
✓ Average age HVAC employee: ~55
✓ Employment of HVAC techs projected to grow 14% next 5 years
✓ State & City license requirements further decrease candidate pools
✓ Internal competition for local talent
SUSTAINABLE TECH PROGRAM OBJECTIVES

Comprehensive career development program

**TECH ENTRY PROGRAM**
Provides candidates with technical aptitude, but no facilities experience with the basic skills for an entry-level technician job in CBRE.

**TECH CERTIFICATIONS**
Improving skills through motivation and recognition for reaching development milestones, while providing an internal database of qualified technical talent.

**TECH ADVANCEMENT PROGRAM**
An online training needs assessment and career planning tool that addresses technical and soft skills, goals, mentoring, and continuing education.

**COMPETENCY CARDS**
Provide the practical aspect of hard and soft skills development.

**FEDERAL RESOURCES**
Understanding legislation pertaining to blue collar career development and education.

**OUTREACH & RECRUITING (HR PROGRAMS)**
Align technical operations leaders with HR leaders to support the development of a successful technical recruiting strategy.

Improve succession planning, retain our technical workforce and refocus hiring efforts on entry-level talent.
TECH ENTRY PROGRAM
TECH ENTRY PROGRAM
Sustaining technical workforce through apprenticeship

90 Day Program

8 MODULES
• HVAC
• Electrical
• Plumbing
• Exterior repair
• Carpentry/Hardware
• Preventive Maintenance
• Building Automation
• Customer Service

9 COMPONENTS
• Safety
• Theory
• Tools
• Components
• Supplies
• Maintenance
• Troubleshooting
• Repairs
• Common Mistakes

STRUCTURE
• Micro Learning
• Video
• Practical/Hands on
• Quizzes
• Final Exam
**TECH ENTRY PROGRAM**

Example: MODULE 3 - PLUMBING

**LEARNING REQUIREMENTS**

- Blood Borne Pathogens
- Water shut-offs (valves)
- Basic toilet and urinal repair
- Basic sink faucet repair
- Using a hand auger and a power snake
- Caulking 101
- Plumbing tools and proper usage
- Water pressure

**SKILLS ACHIEVED**

- Clear clogged drains
- Isolate water lines
- Basic toilet and urinal repair: wax rings, sloan valve kits and spud gaskets
- Replace caulking
TECH ENTRY PROGRAM
Hiring Recommendations

Start Maintenance Technician Apprentice at minimum wage.

Offer compensation increases throughout the year.

Document performance at regular intervals.

Promote to Maintenance Technician after 1 year.
TECH CAREER DEVELOPMENT TOOL
Cultivating our internal talent

The Tech Career Development Tool focuses on:

- Career mapping
- Soft skills/behavioral
- Licensing/certifications
- Continuing education
- Knowledge assessment (hard skills)
- Targeted learning
- Manager/Technician development meetings
- Mentoring
- Goal setting
TECH CAREER DEVELOPMENT TOOL

### Plans for Rachel Roeper

#### 3. Building Engineer - Core

<table>
<thead>
<tr>
<th>Type</th>
<th>Plan Item</th>
<th>Due Date</th>
<th>Progress</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Development Tool Instructions</td>
<td>Go to the Video Course to learn how to utilize the Career Development Tool.</td>
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<tr>
<td>Employee Self-Reflection</td>
<td>Self-Reflection Nov 26, 2016</td>
<td>Dec 30, 2016</td>
<td>1 of 1 Form</td>
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<tr>
<td>Assessment 1: Building Automation</td>
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<tr>
<td>- Building Automation Systems - Building Engineer (BEC)</td>
<td>Taken on Nov 13, 2016 by Rachel Roeper</td>
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<td>Dec 30, 2016</td>
<td>0 of 1 Assessment</td>
</tr>
<tr>
<td>- FAIL Overall Score: 50% correct on 70% benchmark  Instrumentation: 100% correct</td>
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<tr>
<td>- Circuits: 65.07% correct  Refrigeration Systems (ME): 50.00% correct  Basic Electronics: 33.33% correct  Electronic Test Equipment: 0% correct</td>
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</tbody>
</table>
KNOWLEDGE ASSESSMENT
KNOWLEDGE ASSESSMENT

Knowledge Assessment

Assessment Competencies:

- Heating
- Building Automation
- Electrical
- Motors
- Emergency Power
- Energy Management
- Fire Systems/Sprinklers
- HVAC – Air Side
- Cooling
- Refrigeration
- Hydronic Systems
- Plumbing
- Preventive Maintenance
- Water Treatment
- Carpentry/Hardware
- Customer Service
- Work Order Management
CERTIFICATION/RECOGNITION
TECH CERTIFICATIONS
Improving skills through motivation

MAINTENANCE TECHNICIAN

1

BUILDING ENGINEER

3

Specialized Certifications

2

4

Electrician
Instructor
Lubrication

Refrigeration
Leadership
Root Cause Analysis

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PARTNERSHIPS
PARTNERSHIPS AND RECRUITING

• Alignment of Engineering Team and HR & Recruiting group
• Trade school outreach
• Relationships with military separation organizations
THANK YOU.

Gracias.  謝謝.  Salamat.  धन्यवाद.  Obrigado.  شكرا
Спасибо.  감사합니다.  ধন্যবাদ.  Danke.  ありがとう.
Merci.