Creating Change

Ellen R. Tohn
ERT Associates

e.tohn@attbi.com 508.358.7770



Envision the Change

- Housing built & renovated differently
- Residents aware of & act on health concerns
 - Home buyers
 - Tenants

Key Questions

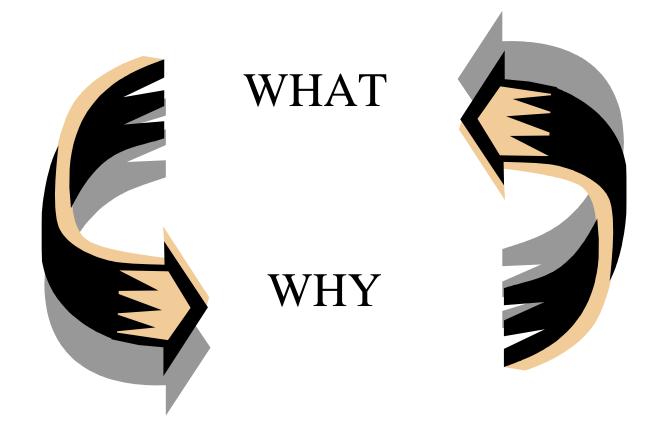
- Who people & organizations that should act differently
- What what should they do
- Why what will it take to convince them
- THE KEY IS THE ORDER

Key Questions – WHO

	Affordable Housing	Market Housing
Build	HFA; Community Development; CDCs; HA; HUD	Builders, Insurance,
Renovate	same	same
Maintain	Same + Property maintenance	Same + owners
Residents	Doctors	Doctors, insurance



Interactive model



New England Experience

- Healthy Homes Building Guidance
 - Developed with input from building scientists, housing developers, finance agencies, health advocates/researchers
- Feedback Through Training
 - Over 200 trained

Construct/Rehab - The "Why"

- Non health reasons: durability; maintenance costs; energy; common sense
- Mold liability anxiety
- Health asthma (secondary issue)
- Final Guidance after feedback

Building Guidance Moisture Excerpts

- Exterior venting bath & kitchen fans relative humidity 30-50%
- Pan flashing on windows & doors
- Capillary breaks in footings
- Avoid plumbing in exterior walls
- Don't install carpet in wet areas
- Seal big holes to stop air flow & pests
- Don't refinish damp/musty basements without controlling moisture -- HVAC issues



Exterior Venting Fans





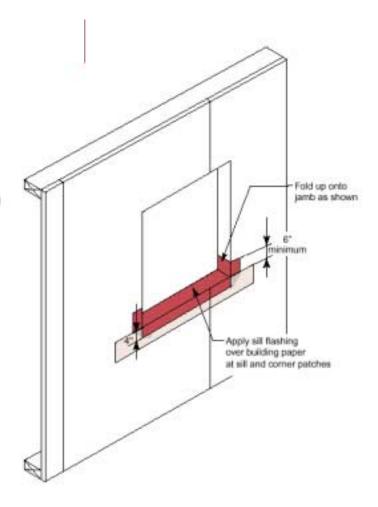




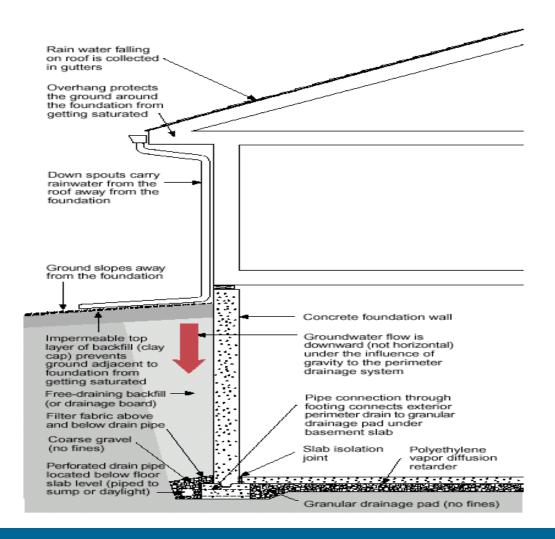
Pan Flashing

Figure 1 Pan Flashing

- Can use adhesive hituminous membranes as sill flashing only with asphalt impregnated felts, coated papers or foam sheathing; do not use adhesive hitumen-based membranes or butyl flashings with plastic housewraps due to chemical incompatibilities
- Use building paper as sill flashing with plastic housewraps



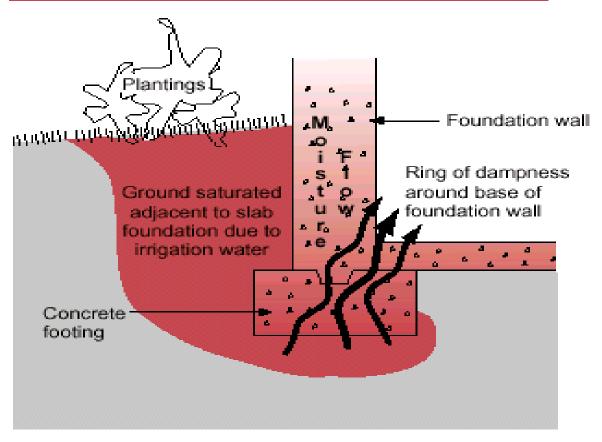
Water Managed Foundations





Capillary Breaks

Capillary rise through concrete footing



Asthma Regional Council Progress

	Change Standards	Units Affected	Pilots
СТ	Pending	4-6	Yes
MA	Boston DND & BHA State	15 & 14,300 + 400 Pending	Yes, if \$
ME	Housing Finance Authority	Pending	Yes, if \$
NH	Housing Finance Authority CATCH	700 20	No need
RI	Housing Finance Authority	600	Yes. 2003
VT	Housing Conservation Bd Housing Finance	200 under guidance 400 Pending	Uncertain
	TOTAL	14,300 maintain 2,000 new or rehab	



Affordable Construction/Rehab

Who ---

Housing Finance Agencies

Community Development Agencies

CDC's; Housing Authorities

Why ----

Durability & Maintenance Costs

Mold: insurance & liability

Asthma



ARC Healthy Homes Building Guidance & Training



Market Construction & Rehab



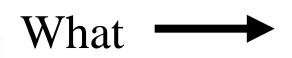
Builders, Developers, Insurance/reinsurance, State Insurance Regulators



Repairs & Call Back Costs

Mold: insurance & liability

Asthma – buyer concerns



ARC Healthy Homes Building Guidance & Training ???

Residents

Who ---

Occupants, Doctors, Insurance/reinsurance

Why ---

Health concerns -- asthma

Maintenance costs

Spiraling costs to insurance

What -

ARC Healthy Homes Building Guidance & Training; Medical model ???



Things to Remember

- Ask
 - Who can make change
 - Why will they change look at non health
 - What can we agree they should do
- Different Audiences
- Build momentum
 - Regional Efforts
 - National Partners
 - Models and Document Benefits