

# ELECTRICAL WIRING IN SIPS

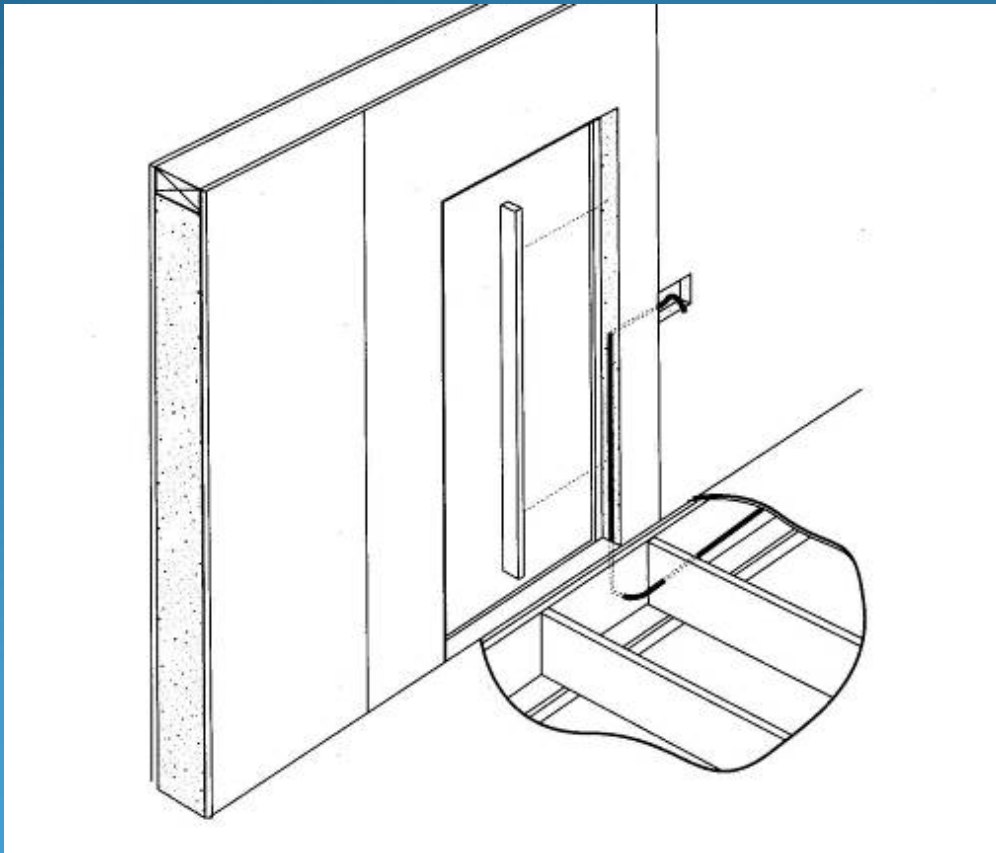
TIPS, TRICKS & SHORTCUTS



# WHAT NOT TO DO



# PLANNING HELPS EVERYBODY



**Door buck left  
out for electrical  
access**

**Route foam  
behind buck  
for wire  
raceway**

# Chase Marking

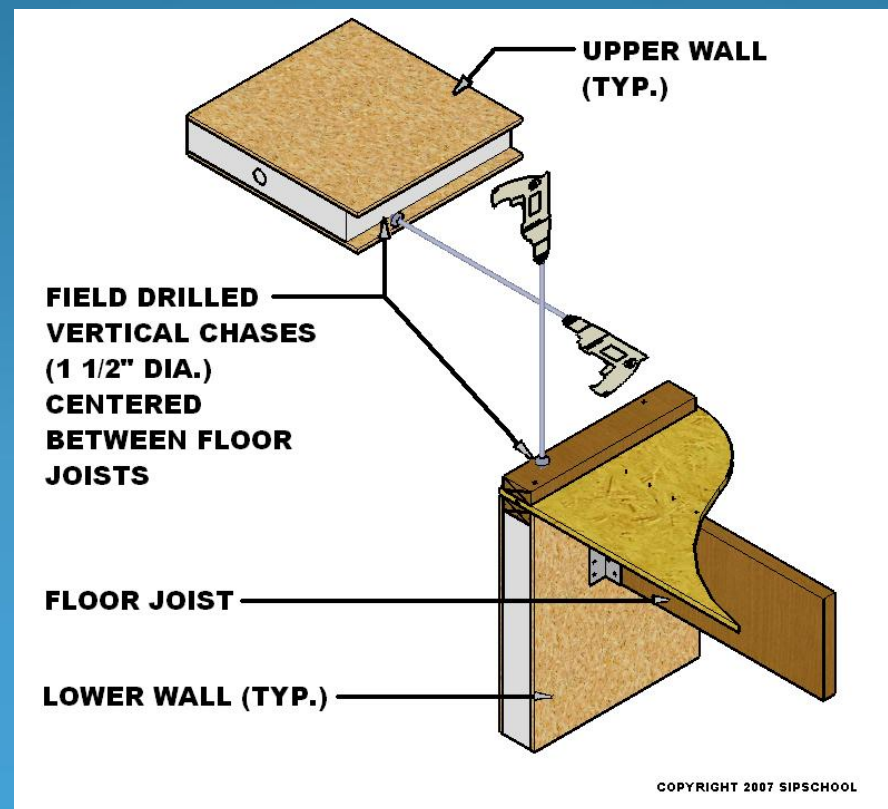
- EPS does mark the vertical and horizontal chases with a marker line at the edge of the panels. It is always recommended to check alignment between splines and panel routes as you set panels.

# THINK OF THE NEXT GUY



# WHO DRILLS THE HOLES

- The chases are much easier to work with if the plates are drilled before roof or floor trusses are installed



# Between floors-marking critical

**UPPER WALL (TYP.)**

**1 1/2" DIA.  
HORIZONTAL  
FACTORY CHASE @  
14" A.F.F.**

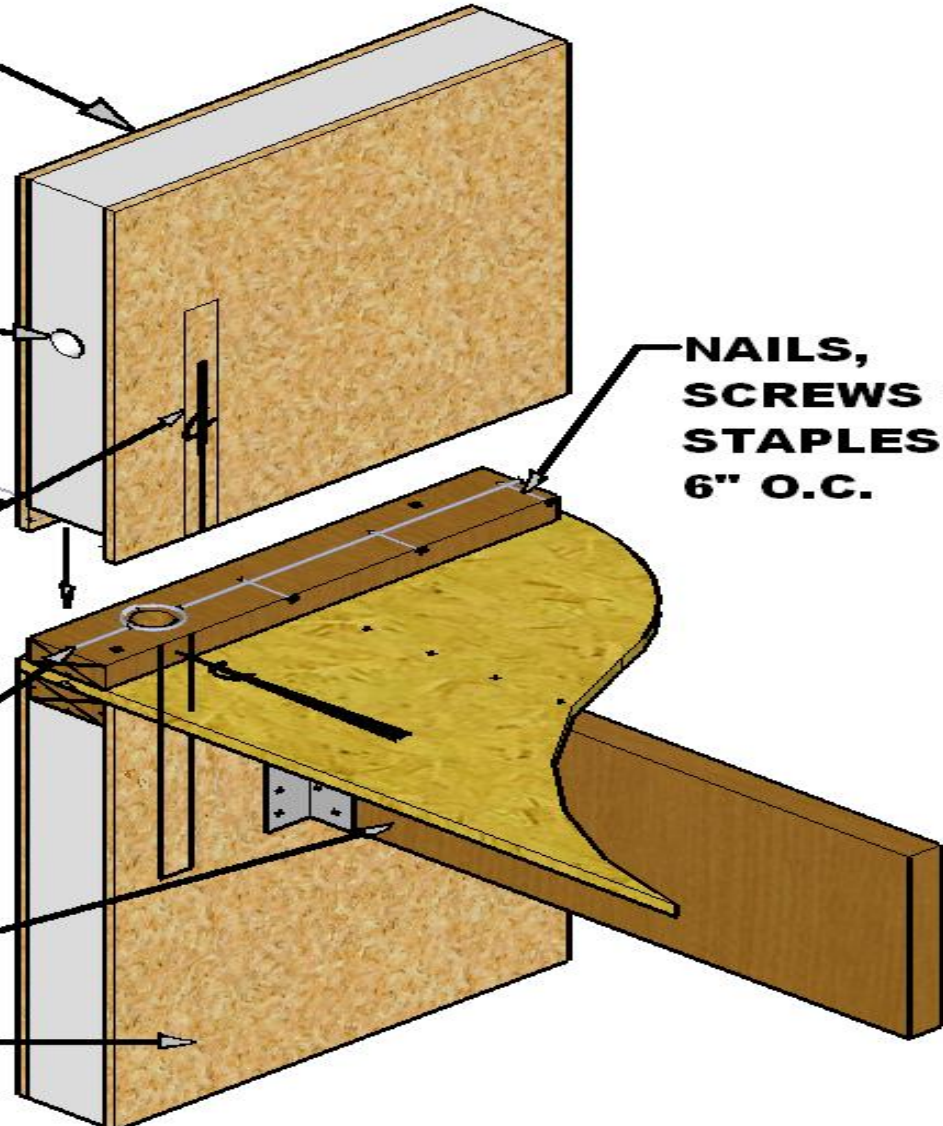
**FIELD DRILLED AND  
MARKED VERTICAL  
CHASES (1 1/2" DIA.)  
CENTERED BETWEEN  
FLOOR JOISTS**

**CONTINUOUS  
PANEL SEALANT**

**FLOOR JOIST**

**LOWER WALL (TYP.)**

**NAILS,  
SCREWS OR  
STAPLES @  
6" O.C.**



# COMMUNICATION

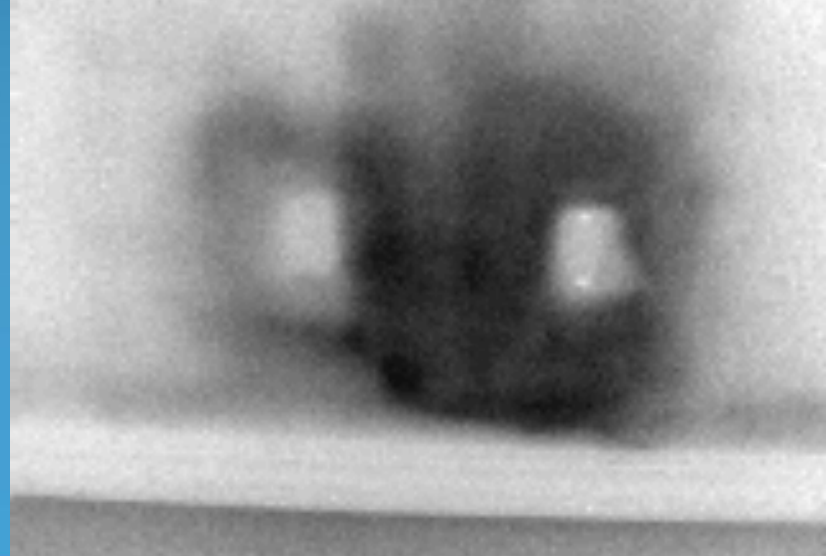
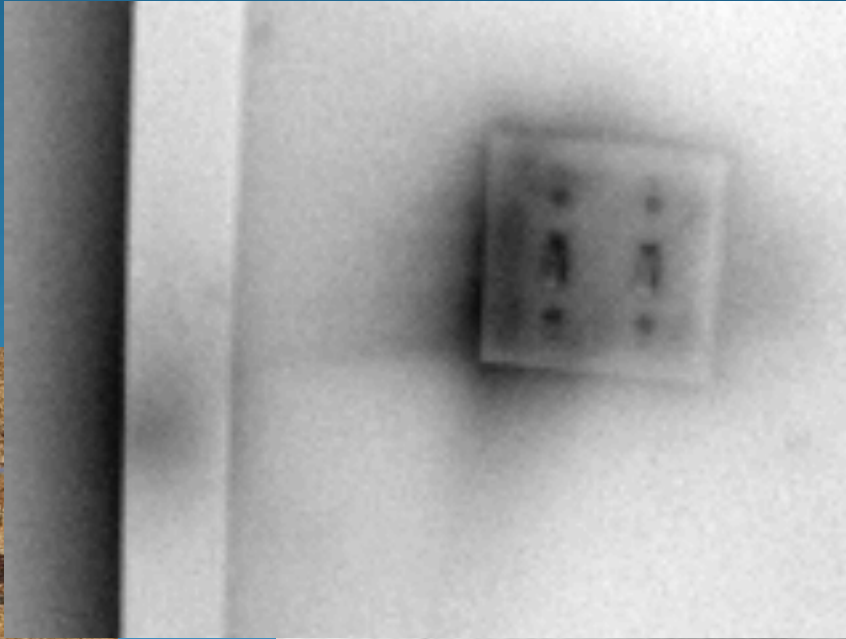
- Between the builder and Electrician
- Between the homeowner and Electrician
- Between the Dealer and GC
- Between you and EPS (special needs)
- Talk About –timing –air sealing-appointment of tasks  
(who will drill the holes)

# CODES VS. FIXTURES

- Does the box meet code for weight or number of wires



# REMEMBER TO AIRSEAL



# Summary

1. Get a good relationship with a local electrician. (only train once, and he will know local rules)
2. Get him involved in the begin. (let him know locations of doors, window, switches special plugs and needs)
3. Give him the use of building and occupancy (Type V wood, enclosed race 1 ½”, 15 minute barrier.

# Glossary of Terms

- NEC- National Elec.Code (2005)
- NM & NMC-Non Metallic Cable- **Romex**
- MC Cable- Metal Clad (flexible) Also AC
- EMT-Elec. Metal Tubing
- ENT- Flexible plastic – blue smurf tube
- SmR- Surface Metal Raceways
- BM- Babe Magnets-Corvettes GTO's

# Classification & Building Codes

- A) Local jurisdiction has authority
- B) Construction methods & fire ratings

see annex E from NEC 2005 (page 1283)

Type 1 Fire Resistive

Type II Noncombustible

Type III Combo Combustible & Noncombst.

Type IV Heavy Timber

Type V Wood

Solid Core Buildings are classified by  
NEC as Type V Wood

Solid Core chase is behind a 2x4 (1  
 $\frac{1}{2}$ " )

Solid Core is rated at 15 Min. thermal  
barrier

# Wiring Methods - NEC article 330

2005 Handbook

Page 347

B) MC Cable ....(Article 330)

AC Cable ....(Article 320)

EMT Cable... (Article 358)

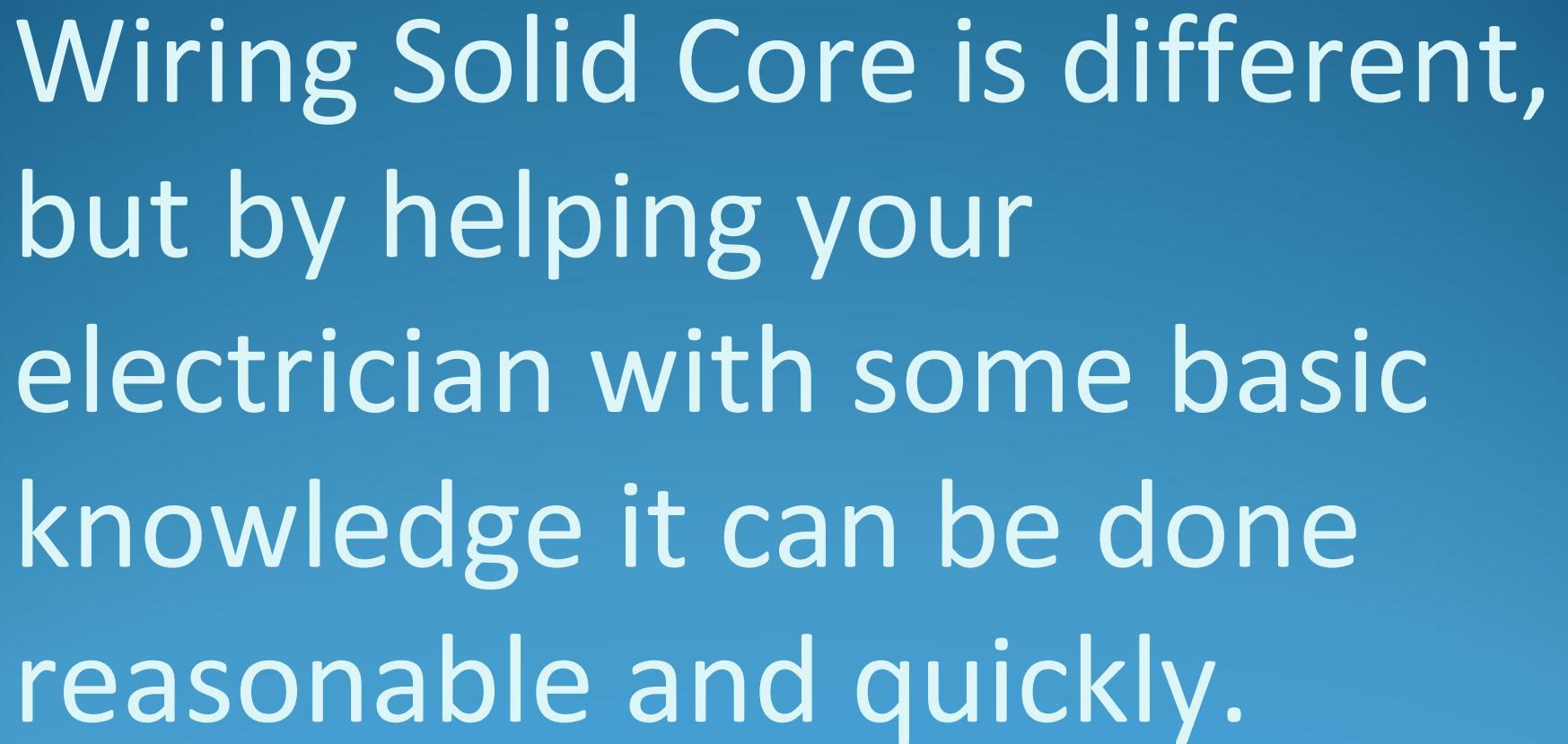
ENT Cable....(Article 362)

Plan..Plan ...Plan the installation (Talk to your electrician in quoting stage)

- a. Work with local jurisdictions
- b. May want to designate frame in place chase walls in combination with Solid-Core panels or fir out areas where panels or control boxes will be located.

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Wiring Solid Core is different,  
but by helping your  
electrician with some basic  
knowledge it can be done  
reasonable and quickly.

# Thanks for Listening

- Any Questions we can help with ?
- Any comments about good or bad ideas
- Direct all Questions to Lad

# PLUMBING

- Plumbing should not be in exterior walls at all!!
- Kitchen vent can be
  - 1) brought to an interior wall within 6'
  - 2) use the method for island venting
  - 3) some areas allow studor or pro vents
- Water lines can be brought up through the floor or through the cabinetry
- Water spigots should have a hole drilled large enough to foam around it to seal