According to The Brick Industry Association, chimneys require special attention to prevent costly damage, which often results from moisture penetration. Because chimneys project above the roofline, they are completely exposed and highly vulnerable to the elements. Proper design, workmanship, materials, and occasional maintenance of chimney exteriors are critical to the safety and performance of masonry chimney systems. When leaking or water damaged chimneys are encountered, the cause/s must be determined before steps to correct the conditions are undertaken. The following checklist will help determine the methods used to satisfactorily recondition the chimney system. Repairs and/or maintenance may be necessary to insure a safe, long-lasting and properly functioning chimney system.

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
<th>Specific Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Were suitable materials used for base flashing and counter flashing?</td>
<td>❑ Yes ❑ No ❑ Not applicable (NA) to this structure</td>
<td></td>
</tr>
<tr>
<td>2. Are the flashing's lap joints sealed?</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
<tr>
<td>3. Are there problems up roof from the flashing that cause leaking, i.e., potential leaks from valleys, crickets, improperly flashed vents, gutters or downspouts.</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
<tr>
<td>4. Are mortar joints well filled? Vertical head joints should receive particular attention as they are often improperly filled during the original construction.</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
<tr>
<td>5. Have small separations or cracks developed where mortar joins the masonry units?</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
<tr>
<td>6. Were incompatible mortar mixes used that resulted in a poor suction bond, between the unit masonry and mortar?</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
<tr>
<td>7. Are mortar joints too wide, which may be causing leakage? Thinner joints are less likely to cause leakage.</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
<tr>
<td>8. Are mortar joints water resistant, such as concave or V joints? Flush or raked joints almost always cause leaking or water permeance problems.</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
<tr>
<td>9. Are mortar joints missing, loose or eroded?</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
<tr>
<td>10. Are there cracks in the brick or spalled bricks?</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
<tr>
<td>11. Are there stains or efflorescence on the chimney?</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
<tr>
<td>12. Are there vents in the cavity areas or masonry chases surrounding the liner?</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
<tr>
<td>13. Is there excessive moisture in the flue gasses from an improperly vented or sized appliance?</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
<tr>
<td>14. Are there vines or other excessive plant growth on the masonry? This can be a sign of excessive moisture in the system. Plants such as Ivy can weaken mortar joints.</td>
<td>❑ Yes ❑ No ❑ N/A to this structure</td>
<td></td>
</tr>
</tbody>
</table>

CHIMNEY PROBLEM CHECKLIST

Name: ________________________________ Location: ________________________________
Address: ________________________________ State: ________________ Zip Code: ________________
15. Is there excessive darkening or visible moisture present in the masonry for several days after a rainfall?
   - Yes
   - No
   - N/A to this structure

Specific condition

16. Are there damp musty odors in the firebox or the basement clean out?
   - Yes
   - No
   - N/A to this structure

Specific condition

17. Are there eroded firebrick and/or mortar joints in the firebox?
   - Yes
   - No
   - N/A to this structure

Specific condition

18. Are damper casings rusty, moisture in the ash or creosote deposits on the smoke shelf?
   - Yes
   - No
   - N/A to this structure

Specific condition

19. Are there any exterior corbels or ledges against mortar joints where water can collect or pond, and subsequently seep into the wall system?
   - Yes
   - No
   - N/A to this structure

Specific condition

20. Is the chimney terminated on top with a mortar wash? Mortar washes are the most common and least effective chimney crowns. The top of a masonry chimney warrants close attention to prevent moisture penetration.
   - Yes
   - No
   - N/A to this structure

Specific condition

21. Are there cracks in the crown wash?
   - Yes
   - No
   - N/A to this structure

Specific condition

22. Is there an expansion joint or a flexible sealant between the crown and the flue tile?
   - Yes
   - No
   - N/A to this structure

Specific condition

23. Is there sufficient slope in the crown?
   - Yes
   - No
   - N/A to this structure

Specific condition

24. Does the crown project past the exposed chimney?
   - Yes
   - No
   - N/A to this structure

Specific condition

25. Are drips provided on the crown’s underside?
   - Yes
   - No
   - N/A to this structure

Specific condition

26. Is there a rain cover/flue cap covering the flue?
   - Yes
   - No
   - N/A to this structure

Specific condition

27. Are flue tiles cracked or damaged? Are mortar joints between tiles missing?
   - Yes
   - No
   - N/A to this structure

Specific condition

28. Are there any cracks in the chimney foundation due to settlement or faulty design?
   - Yes
   - No
   - N/A to this structure

Specific condition

29. Is there dampness or moisture rising up the chimney wall by capillary suction from ground water?
   - Yes
   - No
   - N/A to this structure

Specific condition

30. Is there sufficient slope or drainage away from the chimney foundation?
   - Yes
   - No
   - N/A to this structure

Specific condition

31. When water is applied to the visibly dry masonry, does it disappear or soak into the system within a few seconds?
   - Yes
   - No
   - N/A to this structure

Specific condition

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Inspected by: ____________________________

Company: ______________________________

Address: ________________________________

Phone: _________________________________

Place business card here and photocopy.