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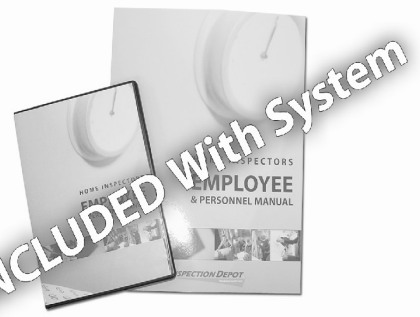
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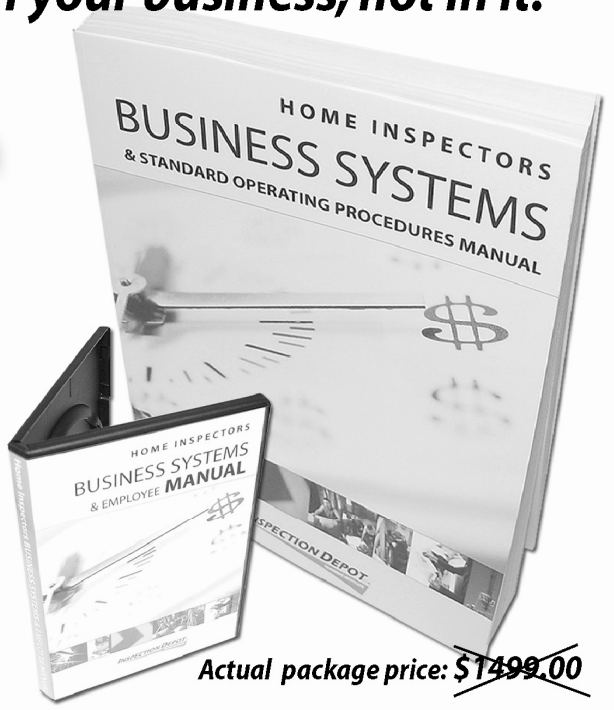
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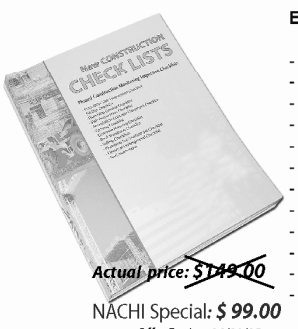
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Jacksonville			June	23-24
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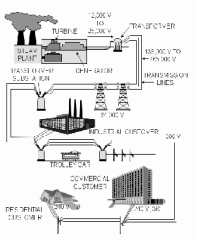
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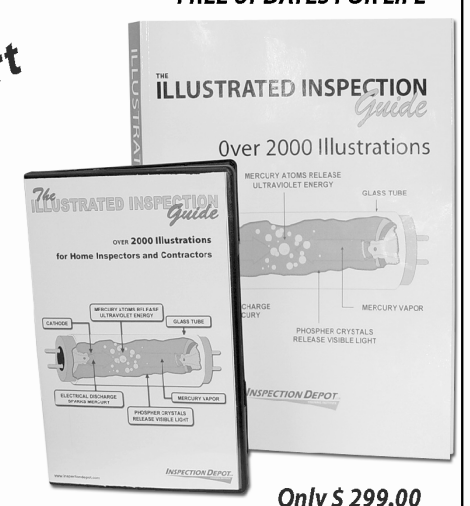
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Electrical Inspection Techniques and Methodologies

By Joe Farsetta
Chairman
NACHI Ethics Committee

ELECTRICAL SYSTEM INSPECTION

The following information is for illustrative purposes only. It touches on many items which should be examined during an electrical inspection. It is not meant to be technically exhaustive or all inclusive. Nor is it meant to suggest that the sequence depicted is the only way to perform an electrical inspection.

INSPECTING EXTERIOR ELEMENTS

Depending upon where the house is geographically located, and when it was constructed, the inspector could encounter differing electrical installation methodologies, materials, and standards.

DROP WIRES AND SERVICE CONNECTION POINTS

The first items for the inspector to examine will exist on the home's exterior. First, it is important to establish the path the utility company, or electrical supplier, took to deliver power to the dwelling. In many cases the cables come from a utility pole, via overhead (aerial) routing. Examine the number of cables present. If two wires are present, the dwelling most likely is powered with 110 or 120 volts of alternating current (AC). Where three wires are present, the home is most likely powered with 220 or 240 volts of alternating current. The three physical cables bring in 1110 or 120 volts between each hot leg, and ground. The combination of the two legs equal 220 or 240 volts.

The next item to examine is the physical connection to the structure. The cables should be securely anchored, and a weather-head should be present. Electrical cables should also physically loop upwards to the weather-head. From this point, examine how closely these cables are physically located to any window. Height is also important, and the minimum height to the earth should be 10', and a minimum of 12' if above a driveway. They should also not be within 3' of any window.

Examine the service drop wire next. This is the cable, which extends from the weather-head to the electrical meter. In some older installations, the meter may exist on the interior of the dwelling. Other installations include electrical meter and pan located on the home's exterior. Carefully examine the exterior of the cable for signs of wear, including fraying, cracking, or the appearance of individual conductors. The cable should be smooth and intact. Even older cloth wrapped cables should be intact. If not, it may need replacement. Examine the entry point to the top of the meter. Is it properly sealed to prevent moisture intrusion? If not, note it as it is a defect. Examine where the cable protrudes from the meter pan, and continues to the homes interior or to the main electrical panel. On the West Coast, it is relatively common to see this panel on the home's exterior, while in the Midwest and East, installations on the home's interior are more prevalent.

Some dwellings are fed via underground conductors, known as service laterals. In these instances, examination of the conductors will be limited. This cable is referred to as the service entry cable, and it should be relatively smooth and intact. If the electrical panel is on the home's exterior, make sure it is rated for outdoor use.

INTERIOR ELEMENTS OF COMMON ELECTRICAL SYSTEMS

THE MAIN ELECTRICAL PANEL

Examine the panel, whether interior mounted, or on the exterior. Look for signs of rust, or burn marks. Look for excessive moisture, loose or protruding wires, missing screws, or any other sings that there may be problems lurking.

Your life may depend on it!

With a voltage detector, or Tic Tracer, check the panel cover and casing for signs of voltage. DO NOT touch the panel before ensuring that the box or cover is not energized with stray voltages.

Ensure that you are wearing appropriate Personal Protection Equipment (PPE) before proceeding. Open the panel door, and look for a main fuse or circuit breaker. Older fused panels utilize main cartridge-style fuses on the entry, while modern panels use a conventional main circuit breaker. Regardless, either should be marked as "Service Disconnect".

Note the size of this breaker or fuse. It will be marked as 60, 100, 150, or 200 in most instances. Older homes were sometimes equipped with 60-amp service, but with the popularity of modern appliances, such as dishwashers, air conditioners, electric stoves or ovens, computers, and so on, 60-ampere installations may be inadequate. As such, a minimum of 100 amperes is recommended, with a trend towards 150 or 200-amperes as the emerging standard. Houses which have only 110-120 volt main services are underpowered, and a service upgrade with new meter, pan, and main panel should be recommended. This is due to the fact that most major appliances, such as central air conditioning units, electric heat, electric clothes dryers, and electric ranges use 220-240 volts.

Next question: Is the panel properly marked?

Are all branch circuits properly identified? They should be.

In instances where screw-in fuses are utilized, look for discarded fuses laying around, this is often an indication that there may be an overloaded circuit somewhere. Look at the dead front cover for signs of scorching or burn marks.

USE EXTREME CAUTION BEFORE PROCEEDING FURTHER!

The following section needs to be carefully read, and the Inspector should use extreme caution before proceeding. Removing the dead front cover of electrical panels is necessary in most cases, to examine how the individual branch circuit conductors are connected, and to help determining the condition of the panel and wiring. This is one of the most hazardous actions the Inspector can take during the inspection process.

Extreme Caution must be taken at all times.

Close the panel cover and carefully remove the panel screws. Place the screws in a safe location, and carefully remove the panel cover. Place the panel cover out of reach, and proceed back to the panel. Under no circumstances should anyone place their hands or any object inside the electrical panel. Electrocution can easily result.

Examine the service entry conductors. Try and determine if they are the proper size for the amperage rating of the main breaker. They can be rated HIGHER than the breaker, but NOT lower. Simple plastic gauges are available to assist with this process. Use extreme caution when around any live conductor. Electrocution can occur. Examine the condition of the cables, and the manner of connection. Also examine the position of the main breaker. "On" should always be "Up." Some manufacturers mount the main breaker sideways, which is also acceptable. Many times, the main conductors will be made of stranded aluminum cabling. If this is the case, be sure and look for the presence of anti-oxidizing compound at the main terminal lugs. It is a black, greasy appearing substance, and should be present on aluminum connections, unless the panel is properly rated for connections absent of this compound. These panels typically have markings indicating whether they are rated or not.

Look at the panel's overall rating. If it is equipped with a 200-ampere main breaker, make sure that the panel is rated for it.

Count the number of breakers in the panel.

A good rule of thumb to remember is 20 breakers for 100-amp service, 30 breakers for 150-amp service, and 40 breakers for 200-amp service.

ONE BIG PARALLEL CIRCUIT

In a previous article, we spoke of series and parallel circuits. This is an important concept to grasp. If you look at the physical construction and connections to an electrical panel, one can see that it is a big parallel circuit. Although individual circuit breakers control a branch circuit, all breakers share common electrical paths. The circuit breakers attached on the left side of the panel are all commode to one hot feed leg, while the breakers connected on the right side share the second hot leg.

With all parallel circuits, Ohm's law comes into play. Every branch circuit has some resistive value when a device or appliance is attached to it. Each successive device connected n parallel reduces the overall resistive value, as it is connected in PARLLEL. As resistance drops, current flow increases. This is why connecting too many devices to a circuit can overload it. Considering that circuit breakers will trip at a sustained draw equaling 80% of the actual rating, this helps explain how and why breakers trip or fuses blow.

As we stated, not only are individual devices connected to single branch circuit wired in parallel, so then are multiple breakers. As each branch circuit is connected to the power bus behind the breakers, the overall resistance of circuits connected to the panel also decreases. This allows the current needed to feed all these circuits to increase. This helps to explain how and why the panel functions.

GROUND SOURCES

Next, examine the grounding sources. The panel will have a grounding conductor supplied from the power company. It is typically un-insulated and is stranded. It may connect to the neutral bus bar in the panel. There should also be a secondary wire connected to this same bar. It will likely trace back to the water meter. On older installations, this cable would attach to the street-side of the water meter. Current installation practices have a connection to BOTH sides of the water meter. Look for a third cable. This may be connected to a driven ground rod.

Other installation practices include bonding the hot and cold water sides of the water heater to each other, and bonding any metallic ductwork in the home to ground. These are more modern practices, and may or may not have been an Electrical Code requirement at the time the home was constructed.

This would be the difference between a defect and a recommended upgrade or improvement.

Next item would be to examine the inside of the main panel. Look at the bottom of the panel interior. Is it wet or rusted? How about the circuit breakers? Are there any signs of rust colored powder or streaking in the vicinity of the breakers? If so, it may be an indication of water intrusion. This would be a significant find, as water is an electrical panel's enemy. Where any of these conditions exist, it is sometimes best to call for further evaluation by a licensed electrical contractor.

RULE OF SIXES

There is something known as the Rule of Sixes, which simply means that an electrical panel must be able to completely de-energize all branch circuits with the throw of a hand, or no more than 6 individual circuit breakers. This is the reason for main disconnecting fuses or breakers. If there are more than 6 breakers present in a panel, and the panel has no main disconnect fuse or breaker, it is considered a defect. Condominiums, homes, and apartments with the main disconnect on the exterior, do not require a main disconnect in the panel, as it can be disconnected at a main location before building entry.

DOUBLE TAPS

A common defect seen in electrical panels is the double tap. This term refers to when more than one branch circuit conductor is attached to the same circuit breaker terminal screw. As most of these terminals are rated for a single conductor, the practice is unsafe. There are few circuit breaker manufacturers, which rate their units for two connections. In order for these connections to be acceptable in an electrical panel, the breakers must be verified for the correct rating. Another problem arises with multiple neutral conductors (white wires) connected to single terminal lugs on the neutral bus bar. Only single neutrals are permitted under each neutral terminal lug. Ground conductors (bare or green coated) are permitted to doubles under single terminal screws.

BRANCH CONDUCTORS

Examination of the branch conductors would come next. Note the type of cabling and its composition. For instance, is it metallic sheathed or non-metallic sheathed? Is the metallic sheathing rusting? Does there appear to be a narrow diameter aluminum conductor coming off the sheathing? How about cloth covered cabling? Does it resemble snakeskin? Is the jacketing intact, or does it appear to be crumbling or cracking. Does the jacketing appear to be plastic? What color. Are there markings? What is the wire gauge (remember that #14 copper wire is only rated for 15-amperes). How about branch circuit ground conductors? Are there any present? Where do they terminate? It should be noted that armor-sheathed cable (metallic sheathing) utilizes the sheathing as the ground conductor. Most importantly, note the TYPE of conductors seen. If the conductors are copper, note it. If any are aluminum, note it. Rules for aluminum wiring are somewhat different than branch circuits wired with copper conductors

CONDUCTOR SIZING

Next, you want to pay attention to wire sizing, and connection methodologies. In the article we spoke of wire sizing, ampere ratings, and overheating. That information is directly related, and makes this portion of the inspection critical. Ensure that the proper wire sizing is utilized for connection to a properly sized circuit breaker.

NOTE: The most common wire sizes the Inspector will encounter in a residential setting are #14, #12, and #10. Be advised that copper and aluminum wires will most likely be observed. In some instances, what may appear to be aluminum wiring could be seen, but in reality it may be tinned copper wiring. The only way to determine if this wire is not aluminum would be to remove a conductor, and scrape some of the tinning away, which would reveal the copper core.

This would exceed most inspection Standards of Practice, including NACHI's, and is not recommended.

CONDUCTOR ROUTING IN THE PANEL

Examine the physical routing of the conductors. Are they neat? Is there adequate space on each side of the breakers? Are wires neatly connected to breakers and bus bars? Are there many splices in the panel, and what were they used for?

COMMON NEUTRALS

Next, look for circuits which utilize a common neutral and ground conductor. This is where a single physical cable s used to feed two branch circuits (two circuit breakers involved. This is accomplished where a three conductor with ground cable is utilized. One conductor, which is usually black, is connected to a circuit breaker. Another conductor, which may be red, is connected to an adjacent breaker. The two circuits share a single common neutral conductor, and a single ground conductor. The danger in circuits wired in this fash-

ion is in the fact that, when one of the circuit breakers is de-energized, the neutral conductor is still carrying current from the send, still energized, circuit. There should be a common trip mechanism, between each breaker, which is connected in this fashion.

ALUMNUM BRANCH CONDUCTORS

If aluminum branch circuit conductors were installed, the Inspector needs to pay close attention. Many problems in residential wiring have been attributed to aluminum wiring, including overheating and fire. One common problem associated with this wiring was caused when copper ad aluminum come into contact with one another. A common place where this happens is at the electrical receptacle. If a receptacle was added, upgraded, or replaced and it was not rated for aluminum conductors, a chemical process developed between the dissimilar metals, and resistance would build. Resistance at this point would cause heat, which would exacerbate the problem. Another common area where problems occurred is when and if aluminum and copper conductors were spliced together. The same chemical process would start, with the same results. As a result of these and other problems, many homes have been upgraded through the years to copper conductors. Many other homes still have aluminum wiring throughout. For this reason, it is generally recommended that the system be checked by a licensed electrician. That is not to say that the Inspector should not do a thorough inspection. The electrician will bring the process to a different level, and may recommend upgrading receptacles and switches, including installing pigtails and using proper tools and materials to perform a safe and proper upgrade.

KNOB AND TUBE WIRING

In much older homes, the Inspector may encounter knob and tube (K&T) wiring. This older methodology utilized electrical cable, which was run through, porcelain attachment knobs and looms, attached to, and through structural components of the building. This wiring is pretty easy to identify, as it looks quite different than all other types of electrical wiring you will likely encounter. Some of these older installations are in working order, while many others are not. Should you see this type of wring in a home, use a Tic-tracer to try and determine if the conductors are energized. Examine the condition of porcelain insulators. Look for cracks or broken pieces. See if they are properly secured. Examine the conductors. Look for cracks in the insulation. Any signs of fatigue should be noted. Where this wire passes through wooden members, there should be a ceramic sleeve present, which the physical wire passes through. Pay particular attention to areas where K&T transitions to other cable types, such as metallic and non-metallic sheathed cabling. Many insurance companies are reluctant to underwrite dwellings with this type of wiring, and for good reason, so use caution during the entire inspection process.

When in doubt, don't hesitate to recommend further evaluation by a licensed electrical contractor.

CABLE ROUTING OUTSIDE THE PANEL

Next, examine how the branch cables are routed. Are they neat, or does the installation resemble a rat's nest? This may be an indication whether a licensed professional did the installation, or an unqualified individual. It may also be an indication as to whether any electrical work was properly inspected, as many inspectors do not want to see a tangle of wires. Make sure the cables are properly supported. Examine how they are run through structural elements.

Look for hanging wires with extra slack.

Another common defect encountered is an unsecured cable entering the electrical panel through a raw knockout. No clamp or grommets used. In many cases, this is evidence that work completed is not up to electrical code standards, was performed by an amateur, or was not inspected.

After the inspection of the interior components of any electrical panel is completed,

BE SURE TO REPLACE THE PANEL COVER!

CRAWLSPACES AND OTHER CONFINED AREAS

Should the home have a crawlspace, or any other confined space, use EXTREME CAUTION when entering or inspecting. Follow OSHA guidelines and your own common sense. In many of these areas, electrical cables may be fatigued or can be otherwise damaged. If the space is exposed to high humidity, and armor sheathed cables are installed, the sheathing can be rusted, jagged, or broken. Junction boxes could be open or uncovered, and live wiring exposed. The inspector will likely be crawling, or on his/her back, and be in full contact with earth. Should a human come in contact with energized wiring under these conditions, there could be grave consequences.

An inspector should NEVER enter a wet crawlspace.

JUNCTION BOXES

Look for uncovered junction boxes. This is a common defect. Look for unclamped cables, which enter these boxes through raw and open knockouts. There should be a clamp or grommet present at each penetration. Look for junction boxes with uncapped conductors, or which are overloaded with wires. Look for wall switches and receptacles with no covers. Look for loose, protruding, or unsecured wall switches and receptacles. Pay particular attention to these elements in unfinished garages and basements. Many times, homeowners install lighting fixtures in these spaces. Though many are installed in a quality manner, many are not. Be sure and look at the connection and mounting methodologies.

2 AND 3-PRONG RECEPTACLES

Pay attention to whether the home may have been originally equipped with 2-prong or 3-prong receptacles. If it is equipped with 2-prong units, ensure that the branch cables are equipped with three conductors (hot, neutral, and ground). This will typically indicate whether the receptacles can be upgraded. Remember, if the branch cables are metallic sheathed, the ground will be extended from the electrical panel to the receptacle box via that metallic sheathing.

Two prong receptacles should be the polarized type, with one slot being larger than the other. If not, most modern 2-prong electrical cords will not fit in the slot. Should 2-prong receptacles be present, the Inspector may want to check to see if the receptacle is grounded. An easy way to do this is to turn the power of to the receptacle, and with a multi-meter set to continuity, touch one lead to the center screw of the receptacle cover, and the other to a cold water pipe. There should be continuity, with little resistance. If not, there may be serious problems, as the system may not be grounded.

WALL SWITCHES

If wall switch handles feel loose, they may be fatigues to the point of needing replacement. "Feel" activated dimmer switches to try and determining if they get warm or hot. If they do, they may be defective.

GFCIs (GROUND-FAULT CIRCUIT INTERRUPTERS)

Be sure and test all GFCI receptacles ad breakers you observe.

Follow the manufacturer's recommended testing procedure.

In newly constructed homes, look for GFCI's in all basement, garage, exterior, bathroom, whirlpool, kitchen island, and kitchen counter locations. Recommend that they be installed n these locations, even in older homes. In older homes, absence of these devices may not be considered a defect (depending on the age), and would be considered a recommended upgrade. Of course, a non-functioning GFCI would be considered a defect, regardless of the age of the home. In some instances, where electrical receptacles are ungrounded, GFCI's can be installed. It does not provide a grounded system, but can provide some limited protection. Contact a licensed electrician for advice and recommendations, or for further evaluation.

In bathrooms, switches and receptacles should not be located next to tubs or showers, where a person standing in the shower can touch the switch or receptacle.

FIXTURES, RECEPTACLES, AND SWITCH CONTROLLED DEVICES

Observe all permanently installed lighting fixtures. If a hanging chandelier is noted, ensure that the wiring is intact, with no visible cracks or splices. Turn on as many light switches as possible. See if they activate something. If the homeowner is present, and nothing activates, be sure and ask what the switch controls. Note any that may not function or are marked "do not turn off" or "do not turn on." Note three way switches. Lighting controls for stairwells should control the lights via switches located at the top and bottom of the stairs. Operate all permanently installed appliances. Test a representative number of electrical receptacles. If 3-prong receptacles are present, test with a simple receptacle tester for ground, reverse polarity, etc. Be sure and note if receptacles are installed above electric heating units (baseboards) in rooms. There are rules associated with these installations. Look for a GFCI where whirlpool tubs are plugged in. If none is present, look for a centrally installed GFCI in the electrical panel.

Protected receptacles should be marked as such.

Be sure and note if outlets and switches are not accessible, or are blocked by furniture.

EXTERIOR LIGHTING

Examine exterior lighting fixtures. Make sure that they are securely mounted, and properly affixed to prevent rainwater or runoff from entering in or behind the fixture, itself.

Look for tripping hazards, especially with low-voltage landscape lighting.

ELECTRIC WATER HEATERS

Examine connections to electric water heaters. Ensure that there is a service disconnect adjacent to the unit.

HEATING SYSTEM

Ensure that the heating system has an emergency shutoff switch. Test the switch to ensure that it actually shuts the system down.

For forced air systems, including central air conditioning systems, look for a bond between the metallic ductwork and ground. If the ducts should somehow become energized, the ground connection can save someone's life.

If no ground is observed, recommend one be installed.

CENTRAL AIR CONDITIONING SYSTEMS

Ensure that a shutoff switch exists adjacent to any air handlers. Each air handler should have its own shutoff switch.

Ensure that each central air conditioning compressor unit is also equipped with a service disconnect. Carefully remove cover from unit, and if disconnect is fused, ensure that it is properly rated, according to the specification tag located on the housing of the AC unit. Do not be surprised if you observe a hot, hot and ground connection to the unit, with no neutral. This is considered a proper installation, unless 110-120 volts will be taken for a convenience outlet, in which case a neutral will be required. If that case, a slightly different configuration will be required.

SUB PANELS AND ISOLATED (OR FLOATING) NEUTRALS

In sub panel installations, isolated neutrals are a requirement. What this means is that the neutral conductor, which tracks back to the neutral of the main electrical panel, is bonded to a bus bar in the sub panel which is electrically isolated from the sub panel casing. The grounding conductor, which tracks back to the main electrical panel, is bonded to the ground bus bar ad the sub panel casing. Branch conductors are connected normally, but are segregated, with only neutrals going to the neutral bus bar, and only ground conductors connected to the ground bar. The same rules apply, with each neutral conductor having its own terminal lug on the neutral bus bar.

The only place in which the neutral and ground conductors can be commoned is at the main panel.

APARTMENTS AND CONDOMINIUMS

Many apartments and condominiums have electric maters installed far away from the unit, or from the main electrical panel. In fact, if the main electrical panel is on the interior of the dwelling, and is further that 8' from the meter, an electrical disconnect must be installed. An exception to this rule may apply if a conduit is provided, which is buried or encased in concrete. This disconnect is commonly installed below or adjacent to the meter, itself. Note the rating of this breaker, as it will indicate the service rating to the unit. This configuration means that the disconnect functions as the man panel, and the panel in the dwelling, itself, is actually a sub panel. As such, an isolated neutral is required.

ATTICS

When entering an attic pay particular attention to the routing of electrical cables. No cable should be mounted within 4' of an attic scuttle or pull-down stair opening. If one is, it must be protected against mechanical damage. Examine all wiring. Ensure that junction boxes are properly covered, and that any switches or receptacles have faceplates. Ensure that all cables are properly secured. Pay close attention to wired in this space. Extreme temperatures in summer may fatigue a cable's sheathing.

UV rays entering the attic from windows or vents can also have an affect on any cable which is continually exposed to the sun's light.

Ductwork often exists in attic spaces, so pay close attention to any cable that comes close to ducts. Non-metallic sheathed cables can be easily damages by sharp ductwork!

OTHER ELECTRICAL INSPECTION OBSERVATIONS

Extension cords should not be used to connect garage door openers, nor should common household extension cords be staples in place, nor run under carpeting.

Single-pole switches should be mounted so that "up" designates the "on" position.

If you notice sparking when you operate a switch, it may be defective.

If you observe a flickering light bulb, note if it is the only one that is flickering. If it is part of a multi-bulb fixture, and all the rest are steadily lit, it may be on its way out. If all bulbs flicker, it may be caused by a defective wall switch. If multiple lights flicker, it may be defective wiring, an overloading or defective fuse or circuit breaker, or some other problem. Be sure and look for these items. Momentary dimming when a major appliance is energized is not all that uncommon, but can also be indicative of an overloading circuit, or if the entire house is affected, a problem with the main breaker, entry conductors, or perhaps the home is simply underpowered.

This ends this portion of our Electrical Inspection Techniques and Methodologies series. We will continue in the next issue of Inspector's Quarterly.

NACHI's Online Inspector Examination

The Industry Standard for Assessing Inspectors

How much does it cost to take NACHI's Online Inspector Examination?

The examination is free. You can take the free online exam now from the comfort of your own home. There is no charge. It is graded instantly online.

Do I have to be a member of NACHI to take the free online examination?

No. Anyone can take the exam. Passing the exam is an entrance requirement to join NACHI. You can take the free online exam now, from the comfort of your own home. There is no charge. It is graded instantly online.

Does the exam contain many questions about NACHI?

No. It is a well-rounded general examination to determine the competency of any home inspector. The exam is not association-specific. But much more than that, more people have taken NACHI's Online Inspector Examination than all other inspection examinations combined. Over 40,000 have taken this exam as the printing of this issue. Furthermore the system has built-in intelligence which constantly calculates and recognizes everything from individual repeat improvement to overall industry knowledge trends. All this combined with constant nationwide expert participation and improvement makes NACHI's Online Inspector Examination the industry standard for assessing inspectors.

How many times can I take it?

You can take the free exam as many times as you like, whenever you like, wherever you like. It is different every time. Mathematically there are trillions of versions of NACHI's Online Inspector Examination.

Is the NACHI's Online Inspector Examination different every time I take it?

Yes. It is different every time anyone takes it. The 120 questions are generated randomly. The order of the possible answers is random. The 120 questions are drawn randomly from a much larger pool of questions. Some questions are the same, only worded differently. New questions are being periodically added to the pool after psychometrically testing them.

I heard that NACHI's Online Inspector Examination is too difficult. Is this true?

No. The exam is difficult for some and easy for others. A general understanding of residential construction and components is helpful. Most exam takers who have a background in construction are able to pass on the first attempt even though they have no inspection experience. Remember, if you fail we can use your exam results to help determine what you need to study. NACHI gathers national statistics about each question on the exam. These statistics are automatically updated every time someone takes the exam. Statistics concerning level of difficulty are displayed for each question as you take the exam. Some of the national statistics about the exam, including pass/fail rates, are available on our web site.

I heard that NACHI's Online Inspector Examination is too easy. Is this true?

No. The exam is difficult for some and easy for others. Only about 1/2 the people who take the exam for the first time pass. The average grade is failing. You need a score of 75 to pass. NACHI gathers national statistics about each question on the exam. These statistics are automatically updated every time someone takes the exam. Statistics concerning level of difficulty are displayed for each question as you take the exam. Some of the national statistics about the exam, including pass/fail rates, are available on our web site. Critics must recognize that this exam is NACHI's entrance exam. Passing the exam is required to join NACHI. Other associations have no entrance requirements. Pets and blind men can and have joined other national associations.

How many questions do I have to answer to pass?

It is impossible to say. The exam uses a weighted scoring system. Each of the 120 questions is weighted based on importance. Questions that have safety implications or cover larger issues count more than questions that have less serious implications or are geographically regional. In other words, questions that test to see if you know things every inspector should know are weighted heavily. Questions that test to see if you know things that are near the outside of the scope of a home inspection are weighted lightly. This weighted system is why your score is of a possible 100 though you will be asked 120 questions. Frankly, it is one of the main features that makes this exam great.

Is NACHI's Online Inspector Examination a timed test?

Yes. You will be given only 60 minutes to answer 120 questions (30 seconds per question). If you run out of time before you answer all the questions but still answer enough to score 75 or more correctly, you will still pass the exam.

I understand that the exam contains many questions about wiring and electricity. Why?

It is true that the exam contains extra questions about wiring and electricity. Although "electrical" is only a small part of a home inspection, it is one of the more important parts. This is because electrical problems, unlike plumbing for example, can destroy property and kill people. Safety questions are weighted heavily.

I understand that the exam contains questions dealing with subjects outside the scope of our Standards of Practice. Why should I be tested about items I don't inspect?

It is true that the exam contains questions about subjects outside the scope of our Standards of Practice. However, an inspector must be able to talk intelligently about items such as mold and radon even though he/she is not providing such testing services.

I understand that the exam contains some very easy questions and some very difficult questions. Why?

Some questions may appear too easy or too difficult. That is because there are questions on this examination that are not counted toward your score, but are used by NACHI to monitor overall knowledge of the industry. Eventually questions that are either too easy or too difficult are removed altogether.

Are the questions true/false or multiple-choice?

Both true/false and multiple-choice questions are used. Each question page has two parts. The first tells you how much time you've spent so far, and how much time you're allowed. I t also tells you how many questions you've answered, and how many there are in total. A new feature also gives you an idea of how hard the question is by telling you how well other people have done on it. This information is useful, but don't spend too much time on it, as it will slow you down. The second part is the test question itself. Some questions will be true/false and others will be multiple-choice.

Should I skip a question if I don't know the answer?

No. It is statistically better for you to guess than skip so we have made it impossible to go on to the next question until you pick an answer. Always choose the best answer out of the options given, even if two or more answers seem correct. If you see a question that could be improved or you think is in error, please write it down and contact NACHI once you have finished the examination.

If I don't run out of time can I go back and double-check my answers?

Yes. Examinees are given the opportunity to double-check their answers and correct mistakes before they submit them (within the time constraints of the exam).

How did NACHI determine the passing score of 75?

NACHI used several reasonable methods to come up with this passing score. National pass/fail rates are automatically updated every time someone takes the exam and these statistics are posted on our website. It is interesting to note that one of the methods used for setting the passing score, a version of the Modified Angoff Technique, determined the passing rate should be set at 71.

Can't someone just keep taking the exam until they pass?

Our statistics show that immediate repeat exam takers fair no better over time. NACHI has numerous examples of the exam being taken sequentially by the same exam taker without marked improvement. Some exam takers have tried as many as 15 times in the course of one day without establishing a correlation between success and number of attempts. Post exam interviews show improvement can only come with study between attempts.

Can't a computer hacker cheat?

NACHI's Online Inspector Examination is very secure. Each exam is dynamically created using advanced randomization techniques. The data is then stored server-side, making it nearly impossible to cheat the system.

Is there something I can do to prepare for taking the exam?

Yes. Visit NACHI's Online Inspector University. It is free.

Is it an open book examination?

Yes. You may use notes and books. This statement is included in proctor instructions. Our exam is difficult to pass, even though it is open book.

What will I need to take the exam?

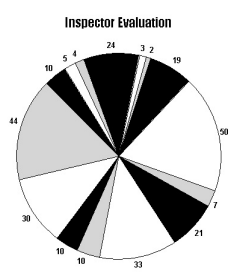
Nothing except a reliable internet connection. Your time will NOT be extended if your connection fails or if your computer crashes during the test. In the case of a connection failure you should be able to re-connect and continue from where you stopped. If you cannot, don't worry because NACHI's Online Inspector Examination is completely free, and you can retake it whenever you wish. If you exceed the test's time limit, the unfinished questions will be counted as incorrect.

I only have a dial-up modem and an older browser. Can I still take NACHI's Online Inspector Examination?

The exam is built with the latest server-side technology for increased security, but implements widely compatible client-side technology so that almost anyone with a web-browser (new or outdated) can use the system. The system is built with a 56k dial-up modem in mind: If an examinee's connection is lost mid-exam, he/she can simply reconnect and start where they left off. The system also uses optimized, low-resolution graphics for faster page loading.

I understand that each question is weighted differently with respect to score. Why?

Questions that have safety implications or cover larger issues count more than questions that have less serious implications or are geographically regional. In other words, questions that test to see if you know things every inspector should know are weighted heavily. Questions that test to see if you know things that are near the outside of the scope of a home inspection or newly introduced, untested questions are weighted lightly. This weighted system is why your score is of a possible 100 though you will be asked 120 questions.



Why is NACHI's Online Inspector Examination a useful learning tool?

Each question is categorized and cross-categorized. Many questions fall into more than one category. This provides the basis for a narrative and quantitative evaluation post-completion so that the examinee knows what needs improvement, whether they passed the exam or not. The summary even includes a color pie chart.

What if I fail NACHI's Online Inspector Examination?

Don't worry. Failing the exam will help you learn what you should study to become a home inspector. NACHI can loan you the study material for free. The exam is free and you can take it as often as you like. You can take the free online exam now, from the comfort of your own home. No charge. It is graded instantly online.

Is my individual score kept confidential?

Yes. Your privacy and the security of your personal information are very important to us at NACHI. This information is kept confidential and individual scores are only revealed to the exam taker. Scores do not appear on certificates. We only use cookies to identify you during the exam. We do not collect personally identifiable information on our web site unless you choose to give it to us. Even if you choose to give us information, we keep it confidential. We do not sell mailing lists, or release your information to anyone outside our organization. We only use the information you give us to fill your order, to honor your request, to determine your apparent need, to provide information you desire, or to improve the quality of your experience on our site. You can be sure that your personal privacy and trust are always safeguarded.

What if I pass NACHI's Online Inspector Examination?

Great. Passing the exam fulfills one of the membership requirements needed to join the National Association of Certified Home Inspectors. But feel free to take it just to uncover your weaknesses.

Why must NACHI members pass this exam every year? Isn't once enough?

No. Once is not enough. Our industry changes over time and our exam is a living document that keeps up with changes in the industry. Associations that permit members to maintain their membership without passing an exam every year or so... are suspect.

What if I barely pass NACHI's Online Inspector Examination?

Don't worry. Passing is passing. Your score is computed and revealed to you at the end of the exam however your score is not reflected on your certificate. There is no reason to keep taking the exam in order to try to achieve a higher score, unless of course you find it fun!

I have taken several different home inspection exams. Why does NACHI's Online Inspector Examination feel easier than other exams?

NACHI's Online Inspector Examination feels easier for several reasons:

- It is free, so there is no financial pressure to pass.
- You can take it from the comfort of your own home.
- You can take it again and again (it is different every time).
- There are no irrelevant questions (found in other similar exams).
- It is not association specific.

National statistics about NACHI's Online Inspector Examination are available online and automatically updated every time someone takes the exam.

Does NACHI accept any other exams as alternatives to NACHI's Online Inspector Examination?

Yes. NACHI accepts exams given by the National Institute of Building Inspectors and the International Code Council as alternatives to NACHI's Online Inspector Examination.

I need to pass an additional state exam. Can NACHI help me pass?

A few states require the passing of an additional state exam. NACHI will help you pass your exam. Everything you need is at www.nachi.org

I need to have NACHI's Online Inspection Examination proctored. Do you offer a proctored version?

Yes. Proctoring is provided in all 50 states by licensed school teachers. You can also use a proctor of your choosing provided he/she is a licensed, practicing teacher or professor and is not your spouse, parent, or relative. Sprint, FedEx, Kinkos, and CompUSA also provide online video conference proctoring for NACHI.

Was NACHI's Online Inspector Examination developed in accordance with accepted psychometric standards?

Yes. But much more than that, more people have taken NACHI's Online Inspector Examination than all other inspection examinations combined. Over 40,000 as of the printing of this issue. Furthermore NACHI's exam system has built-in intelligence which constantly calculates and recognizes everything from individual repeat improvement to overall industry knowledge trends. All this combined with constant nationwide expert participation and improvement makes NACHI's Online Inspector Examination the industry standard for assessing inspectors.

How many exam takers pass? How many fail? What is the average grade? What is the average passing grade?

These national statistics are on our website and are automatically updated every time someone takes NACHI's Online Inspector Examination.

Has NACHI formed a partnership with Community Colleges to administer the exam?

Yes. NACHI has formed partnerships with many Community Colleges across the country. The purpose of these partnerships is to create and offer quality home inspection courses and continuing education credits at the college level.

How does NACHI's Online Inspector Examination differ from other national inspection exams?

- NACHI's Online Inspector Examination is free to all. Other national examinations charge a fee each time you take them.
- NACHI's Online Inspector Examination is built with the latest server-side technology for increased security, but implements widely compatible client-side technology so that almost anyone with a web-browser (new or outdated) can use the system from anywhere. Proctoring is available everywhere, too. Other examinations require you to travel.
- NACHI's Online Inspector Examination is different every time you take it. Mathematically there are trillions of versions of NACHI's Online Inspector Examination. Other exams only have one or two versions.
- National statistics about NACHI's Online Inspector Examination are automatically updated ever time someone takes the exam and these statistics are publicly posted instantly for all to see. Other national examinations refuse to release even their pass/fail rates.
- NACHI's Online Inspector Examination's pool of questions is compiled from submissions by experts and actual inspectors from all associations. Other exams have only used members of one association to produce their pool of questions. NACHI's Online Inspector Examination is a living document that constantly evolves.
- NACHI's Online Inspector Examination is the official NACHI entrance exam. Other associations allow anyone to join without taking any exams.
- You can take NACHI's Online Inspector Examination from the comfort of your own home with a dial-up modem. If an examinee's connection is lost mid-exam, he or she can simply reconnect and start where they left off .
- NACHI's Online Inspector Examination uses optimized, low-resolution graphics for fast page loading.
- NACHI's Online Inspector Examination is not about NACHI. It is not association-specific like other exams.
- NACHI's Online Inspector Examination was built with scalability in mind. Each question (and its answers) includes image support so that images can be added for further illustration. Each question can also support an unlimited number of answers for further scalability.
- NACHI's Online Inspector Examination permits examinees the opportunity to double-check their answers and correct mistakes before they submit them (within the time constraints of the exam).
- NACHI's Online Inspector Examination uses a weighted scoring system. Questions that have safety implications or cover larger issues count more than questions that have less serious implications or are geographically regional. In other words, questions that test to see if you know things every inspector should know are weighted heavily. Questions that test to see if you know things that are near the outside of the scope of a home inspection or newly introduced, untested questions are weighted lightly. Other exams count each question equally.
- NACHI's Online Inspector Examination is very secure. Each exam is dynamically created using advanced randomization techniques. The data is then stored server-side, making it nearly impossible to cheat the system
- NACHI's Online Inspector Examination produces a custom evaluation screen which summarizes your areas of strength and weakness. The summary even includes a color pie chart. Other exams offer little or no summary.
- NACHI's Online Inspector Examination (a living document) is developed in accordance with accepted psychometric standards, insuring an unbiased, valid and reliable assessment of inspector skill, knowledge and experience. NACHI has a full time former university research analyst monitoring the exam. Other examinations are very association specific, and never evolve.
- NACHI used several reasonable methods to come up with our passing score of 75, including a version of the Modified Angoff Technique. It is interesting to note that this method determined our passing score should be set at 71. It is also interesting to note that the average score is failing.
- NACHI's Online Inspector Examination's pool of questions and answers were not each drawn subjectively from a single reference but are generated using input from inspectors and experts from all over the country. Possible answers and the actual wording of the questions are also subjected to this industry wide scrutiny. NACHI's Online Inspector Examination is a living document that keeps up with the times.
- More people have taken NACHI's Online Inspector Examination than all other inspection examinations combined. Over 40,000 as of the printing of this issue. Furthermore our system has built-in intelligence which constantly calculates and recognizes everything from individual repeat improvement to overall industry knowledge trends. All this combined with constant nationwide expert participation and improvement makes NACHI's Online Inspector Examination the industry standard for assessing inspectors.

How much does it cost to take NACHI's Online Inspector Examination?

The examination is free. You can take the free online exam now, from the comfort of your own home. There is no charge. It is graded instantly online.

Note: NACHI has many other free interactive learning tools including NACHI's free online Ethics Obstacle Course and NACHI's free online Standards of Practice Quiz.



Over 130 inspectors attended the NACHI-DUKA Chapter meeting in Ontario on February 23rd.

This Canadian Chapter meets quarterly and has continuing education as its primary focus.

Inspection Excellence

Through Education and Camaraderie

By Nick Gromicko

Members of the National Association of Certified Home Inspectors (NACHI) are the most educated and best trained inspectors in the world. NACHI is committed to keeping it that way. Toward that end NACHI has taken steps to encourage member pursuit and maintenance of inspection excellence and we have accomplished this without additional charge to members. We believe that fees, like taxes, deter professional development, and that the best way to encourage the continuing education of our membership is by supporting variety, accessibility, and affordability in educational options.

NACHI members start off by fulfilling certain requirements before they can even apply for membership. They have access to the NACHI University which is free. NACHI's Ethics Obstacle Course is open to all and free. NACHI's photo web gallery of defects is the largest in the world, open-to-all and free. NACHI's online visual aid frames library is the largest in the world, open to all, and free. NACHI's online exam preparation tool with a pool of over 2500 multiple choice questions and answers is the largest in the world, and free. NACHI's online searchable inspector glossary is the largest in the world, open to all, and free. NACHI's Standards of Practice quiz, which reveals where an inspector may be veering, is self-evaluating, open to all, and free. NACHI, far more than any other source, provides educational events around the world, open to all, and free. NACHI refuses paid advertisements to enhance trust in our information. NACHI's interactive, photo message board, with over 84,000 topics, is the industry's largest and most popular, very educational, open-to-all, and free. NACHI's online Inspector Examination, with over a trillion different versions, taken over 30,000 times, and which generates a custom inspector-weakness pie chart upon completion, is graded instantly, open-to-all, and free. NACHI's 1-day HVAC, mold, and electrical seminars are open-to-all and free to members. NACHI's message board protects free-speech so visitors can determine the truth. NACHI publishes Dear NACHI online which gives detailed answers to specific inspection-related questions, is open-to-all, and free. NACHI provides product recall alerts. NACHI publishes *What's New*, an inspection industry update, online, open-to-all, and free. NACHI's 1/2 day mock-inspections of actual homes provide true hands-on training and are free. NACHI's local chapter meetings typically present technical speakers, are open-to-all, and free. NACHI provides report review services for free. NACHI's annual convention is very educational. NACHI permits all outside/for-profit continuing education providers to advertise their courses to our members on NACHI's websites for free. NACHI maintains a Question of the Day thread, open-to-all, and free. NACHI negotiates member discounts on nearly every continuing education provider's courses. NACHI's meetings distribute a wide variety of educational literature to all for free. NACHI's staff, committee members, chapter leaders, veteran members, special-expertise members, and advisory boards are constantly helping members one-on-one for free. NACHI members typically provide fellow members with free ride-a-longs on actual inspections for free. Over the years NACHI has arranged for third-party providers to offer our members online training for free. NACHI employees some of the world's leading trainers and makes them available to members for free. NACHI does not charge for or unduly withhold approval of any organization's continuing education courses, even those offered by other inspection associations. NACHI's 33,000+ page website is itself very educational. And coming in 2005, NACHI will release a virtual House of Horrors, the Inspector's Quarterly magazine, an online wood destroying insect course, and an occupant hazard recognition primer, all very educational and all free. NACHI's Online Inspector Examination's main purpose, besides testing competence, is to alert members to their weaknesses. The same is true for NACHI's Code of Ethics obstacle course, designed to alert members to possible infractions. The same is true for NACHI's Standards of Practice quiz, designed to alert members to areas they are over and/or under inspecting. All three are pre-application requirements and all free. NACHI even has online educational inspection-related crossword puzzles, open-to-all and free of course.

A variety of accessible and affordable educational options encourages and enhances the professional development of all our members, but our most precious educational tool is our spirit of camaraderie. NACHI members continue to pursue, achieve, and maintain inspection excellence in an atmosphere of members helping fellow members.

Please join us in this spirit.

Inspector tries to boost profits by offering radon testing.

Dear I.Q.,

I want to increase my profits by offering radon gas testing along with my home inspection service. What can I do to ensure profitability?

If increasing profits is your motivation for offering radon testing along with your home inspections, you may want to reconsider. Contrary to popular industry belief, adding radon testing as an ancillary service to your regular home inspection service adds little to your bottom line. Most inspectors do not properly calculate and analyze their business costs. Radon is by far the least profitable of all ancillary inspections. Hidden costs are the reason. Let's expose these costs.

1. Radon testing requires you to place testing equipment or kits in the home then come back on another day to retrieve them. Radon tests require two trips and so your time and travel costs are high.

2. Access to the home is often difficult or denied and extra trips have to be made because of dogs, the lock box being removed, or the owner not home.

3. Radon test kits have to be analyzed by a laboratory which charges for analysis.

4. You must drive or ship (often overnight) the radon kits to the laboratory, suffering shipping costs.

5. In some states radon testing certification or licensing is required:

- States charge fees for this certification
- There are usually required exams which have fees associated with them
- There are usually continuing education requirements which have fees too

6. Quality control and assurance plans often require a certain percentage of tests to be:

- Blanks or unexposed tests
- Duplicates or side by side measurements
- Spikes or tests exposed to a known radon level

All these extra quality control measurements add time, laboratory, and shipping costs and spiked samples require you to pay radon chamber fees.

7. Because radon reports often come in after your home inspection report is delivered, there are extra costs in faxing or mailing the radon reports to your client and real estate agents.

8. Radon tests often have to be redone or repeated for various reasons.

- The laboratory makes an error
- The radon kits get lost in the mail
- The owner unintentionally interferes with the test
- The owner intentionally tampers with the test
- The radon kits get over exposed

Guess who is expected to pay for retesting?

9. Using continuous monitors or electrets requires equipment purchase costs.

10. Long term liability for radon testing is likely higher than most other inspections because radon gas is believed to reduce one's life expectancy (cause death).

Tips for increasing profits on radon testing:

1. Make sure everyone knows you offer radon testing. Many home buyers will order radon testing if you let them know you offer it. Most real estate agents prefer one-stop-shopping. Spreading your costs out is smart. The more radon tests you perform, the less expensive they are per test.

2. Cut costs by placing or preferably retrieving the radon tests on the same trip as the home inspection.

3. Preferably pre-place radon tests and then pick them up during the inspection. The cost to you is the same but your clients acquire added value by receiving their results faster.

4. Join your local Board of REALTORs as an affiliate or associate member so that you can be entitled to lock box access. This allows easier placement and retrieval of radon tests. Note: NACHI can acquire affiliate membership for you if you are having trouble getting a lock box.

5. Try to schedule placement and retrieval of radon tests in conjunction with other radon tests and home inspections in order to minimize travel costs.

6. Push radon testing in your local market. Do not push radon testing on far away home inspections. Take the gravy.

7. Do not use overnight shipping on Fridays. Most laboratories won't analyze until Monday anyway so use 2-day air on Fridays to cut shipping costs.

8. Get bulk discounts by purchasing your kits together with other local NACHI inspectors.

9. Get together with other local NACHI inspectors to ship your radon kits to the laboratory thus sharing shipping costs.

10. Consider subbing-out your radon testing so you can still offer radon testing but with less headaches and costs.

11. Use the NACHI Agreement (between you and your client) to help prevent radon-related lawsuits.

12. Charge more.

Offering ancillary inspections to your home inspection business is great way to increase profits but perhaps consider these more profitable add-on services:

1. Wood infestation/termites
2. Microwave oven leak detection.
3. Electro magnetic field assessment.
4. Lead paint.
5. Asbestos sampling.
6. Septic.
7. Water quality.
8. Well flow and capacity.
9. Natural gas leak detection.
10. Energy efficiency analysis.
11. Mold.
12. Single component inspections.

UPDATE: NACHI now offers free electret recharging to members.

Dear IQ is offered to provide detailed advice and possible solutions to specific questions or problems. Obviously other solutions exist and may be better suited for you and your particular situation. Please submit your specific problem for publication. Your name will not be used unless you give permission.

REALTORS® and Inspectors

An interview with Stephen Cook Vice President of Public Affairs National Association of REALTORS®

By Cory Doane

In a December 2nd interview with Inspector's Quarterly reporter Cory Doane, Stephen Cook, Vice President of Public Affairs for the National Association of REALTORS® had this to say:

"NAR believes buyers should always obtain an inspection from a qualified inspector. A good inspection not only reduces the risk involved in the largest purchase most families make, but it helps the new owner establish a maintenance plan.

Today we know much more about health risks posed by indoor environments. Inspectors can help identify and assess risks, including those from mold and radon. Increasingly, state laws require inspections for these and other potential health hazards before a house can be sold. The National Association of REALTORS® is an active participant in the standard-setting process for indoor air quality and a proponent of disclosing known hazards to potential homebuyers.

REALTORS® should recommend inspectors who are qualified. The smartest course is to recommend several well-qualified inspectors and advise buyers to get references and ask about experience, credentials, report content, cost, and insurance coverage."

The National Association of REALTORS® (NAR) is to real estate professionals what the National Association of Certified Home Inspectors (NACHI) is to inspectors.

NAR is America's largest association, representing 1 million members involved in all aspects of the residential and commercial real estate industries.

Verizon and SuperPages to Promote NACHI Members

NACHI (the National Association of Certified Home Inspectors) recently contracted with Verizon and SuperPages.com to provide advertising designed to promote members of the association.

Beginning April 1st, NACHI member's contact information will be featured prominently on various websites including SuperPages.com.

The one year, five figure, ad contract virtually guarantees NACHI members a first position in over a dozen different inspection-related categories including the search phrase most used by consumers seeking inspectors "certified home inspectors".

A similar contract to promote Canadian members on SuperPages.ca is in the works.

NACHI has had an existing similar contract with Google.com

InterNACHI Logo Usage

NACHI is a member of InterNACHI and so all NACHI members having fulfilled NACHI's membership requirements may also use this InterNACHI logo as they wish.

Members may download various logos by visiting:

www.nachi.org/logos

NACHI.org Ranked #1

NACHI.org rated most popular inspection website ever.

Alexa.com, an Amazon.com company, recently provided traffic ranking data for the inspection industry. The lower the number rank the higher the popularity. The most popular sites in the world are : Yahoo.com with a rank of 1, msn.com with a rank of 2, daum.net with a rank of 3, and google.com with a rank of 4.

Amongst inspection related websites nachi.org ranks #1 at a worldwide rank of 52,355.

Other NACHI websites that rank high include NACHIfoundation.org, FindanInspector.US, and InspectorSEEK.com.

You can see the ratings of other websites at no charge by entering them in www.alexa.com.



NACHI's Ohio State Chapter Launches its own Website

www.OHnachi.org

Mouse Pads For Real Estate

The National Association of Certified Home Inspectors recently revealed another piece of its nationwide real estate agent marketing program. Ergonomic mouse pads, each with a gel-filled wrist rest, are being shipped to real estate agents all over the United States and Canada. The mouse pads, which depict an unhappy couple standing waist high in the flooded basement of their new home, contain the caption, "We should have hired a NACHI inspector."

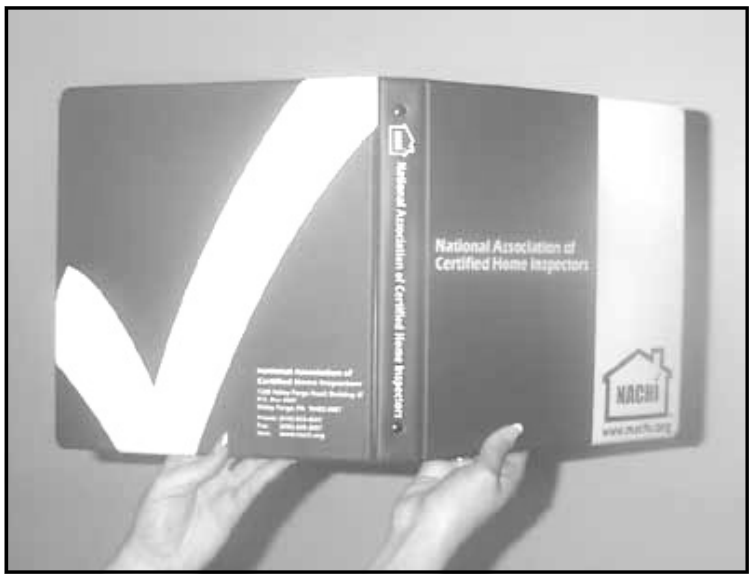
"We registered the URL InspectorSEEK.com and developed software to easily add an inspector search icon to agent's desktops and start menus," said Chris Morrell, Webmaster for NACHI. "The link appears on the bottom of the mouse pad and directs visitors to NACHI inspectors in their area."

"We purchased the highest quality mouse pads available," said Beccah Levine, Director of Development for NACHI. "Each thick, non-skid, ergonomic pad includes a gel-filled wrist rest. We're sure agents will replace their existing mouse pads with ours."

The NACHI mouse pad is free upon request to any licensed real estate agent. NACHI will eventually put a mouse pad on every real estate agent's desk.

The Marketing Tool that Keeps on Marketing

Make Sure your Local Real Estate Office has One



What are real estate agents reading while waiting for you to finish the home inspection? Make sure it isn't the newspaper!

Give them something interesting to read. Fill this 3-ring binder with some the following:

- Some local articles about real estate. (Make copies from the newspaper or internet)
- Multiple copies of the article *What Really Matters*
- Multiple copies of the article *Pre-listing Inspections*
- A copy of NACHI's Code of Ethics
- A copy of NACHI's Standards of Practice
- A copy of NACHI's Continuing Education Policy
- Your marketing literature, flyers, or brochures
- Household tips, maintenance advice, etc.
- A copy of your NACHI certificate
- A copy of your E&O insurance certificate (if you carry insurance)
- A copy of your state license (if your state issues them)
- Copies of a few reference or thank you letters from past clients
- Your business cards (in a 3-ring holder)
- A copy of the article *Is Your Inspector Blind?*
- A home inspection glossary
- A copy of a sample home inspection report
- A copy of *My Promise*

Copy and paste the documents into your own word processor first so that line spacing and fonts are coordinated.

Make sure one of your flyers or business cards is actually taped to the inside cover.

Do not include anything that indicates that you are a "*Candidate*" or "*Associate*" member of any other inspection association. These derogatory terms will work against you (especially on the internet). Many agents blacklist associates and candidates.

The words "National Association of Certified Home Inspectors" alone have strong marketing value. This is especially true with agents who are unfamiliar with you or seller's (listing) agents. The binder itself says a lot about you and your inspection service.

Some members have created labels on their own color printers that say "Please Read" or include their contact info. It is not difficult to match the label's color to the blue of this professional 3-ring binder. However don't personalize the outside too much. You want the outside to appear to be a general reference from a national association.

If you notice the real estate agent sitting down, offer this binder to read. If you notice the real estate agent taking an interest in it or if he/she asks to take some of the literature in it, offer the entire binder to take and keep.

Permit sellers to read through them too. Most sellers are also buyers and you may get another inspection.

Nick's Tip:

The time, energy, and cost of producing nicely packed binders makes them too expensive (unless you form a family assembly line) to give out to sellers in hopes they use your services on the buying end. Sellers can potentially only give you one inspection at most. However, real estate agents will give you many inspections. Let them have the binder to keep. It is too nice for them to throw away and appears to be an office reference (because it is from a national association, not a a specific inspector). It will likely be kept on their office book shelf or in their real estate office library surrounded by other real estate agents. So make sure at least one of your business cards or flyers is taped to the inside cover. You can get pre-punched paper at an office supply store.

Advanced Tip:

If you are leaving the binder at a real estate office, take a marker and write "DO NOT THROW OUT" over the back white check mark. Write it a little sloppy and at an angle over the check mark. We won't explain why...just trust us on this one.



NACHI T-Shirts

NACHI recently purchased thousands of t-shirts to be sent out to Local Chapter meetings. They have the NACHI trademarked slogan, "Inspected Once, Inspected Right" across the back, and the NACHI logo on the front. Shirts in a variety of sizes and colors will be shipped to all Chapter heads to be given away as door prizes.



Brochures Promoting NACHI Members

Brochures promoting NACHI members are being sent to real estate professionals throughout North America.

REAL Property Times

Did you know that InterNACHI publishes *REAL Property Times*?

REAL Property Times stands are being distributed to every RE/MAX office in North America. The free newspaper will, among other things, remind real estate agents to refer their clients solely to NACHI members. Future issues will include the contact information of the NACHI members who service the area the stand is located. The stands will be labeled such as to welcome home-buyers to take a free copy as well. Agents can also order a free subscription online at:

www.nachi.org/freeRPT

FastReply@NACHI.org

In an effort to better answer the thousands of incoming emails NACHI receives, NACHI has launched FastReply@nachi.org

NACHI staff will read all emails first and either answer them or forward them to the member who can best answer them or both.

Welcome Aerotech

NACHI is honored to welcome industry leader Michael P. Buettner, Director of Aerotech P&K Laboratories to NACHI

Aerotech is a publicly traded laboratory serving home inspectors.

Mr. Buettner joined NACHI as a fellow member in March.

Welcome Michael!

Need a Website?

Visit **CPM Web Solutions** at:

www.cpmweb.ca/portfolio.asp

CPM Web Solutions is proud to have recently earned the very rare personal endorsement of NACHI's Nick Gromicko.

NACHI*Credit*

Fresh from the launch of NACHI's members-only professional liability insurance program, our attorney Joe Ferry is deep in negotiations with a major credit card issuer to provide an affinity credit card exclusively for NACHI members.

Also on Joe's agenda is the formation of a NACHI credit union.

As Joe always says "NACHI is no longer just a trade association… it is an empire!"

www.NACHI.org

Ohio State Chapter Designs its Own Logo

Other local NACHI Chapters are currently designing their own logo as well.



NY NACHI Distributes Boxes of Frisbees

The New York Chapter of NACHI recently distributed boxes of NACHI Frisbees to real estate agent's meetings. Each Frisbee contained the NACHI logo and the link to the NY NACHI website:

A *GENERAL RELEASE* to Use When Refunding Fees

TO ALL TO WHOM THESE PRESENTS SHALL COME OR MAY CONCERN, KNOW THAT your client , as the RELEASOR, for good and valuable consideration received from abc inspections, as the RELEASEE, the receipt and adequacy of which is hereby acknowledged, each hereby releases and discharges the RELEASEE, each of the RELEASEE'S subsidiaries and their respective principals, affiliates, related entities, shareholders, officers, directors, agents, employees and their respective heirs, executors, administrators, successors and assigns from all actions, causes of action, suits, debts, dues, sums of money, accounts, reckonings, bonds, bills, specialties, covenants, controversies, agreements, promises, variances, trespasses, damages, judgments, extents, executions, claims, and demands whatsoever, in law, admiralty or equity, which against the RELEASEE, the RELEASOR and the RELEASOR'S heirs, executors, administrators, successors and assigns ever had, now have or hereafter can, shall or may, have for, upon or by reason of any matter, cause or thing whatsoever from the beginning of the world to the day of the date of this RELEASE solely in connection with the home inspection services performed by abc inspections arising out of that certain home inspection dated date of inspection.

Whenever the text hereof requires, the use of singular number shall include the appropriate plural number as the text of the within instrument may require. This RELEASE may not be changed orally.

IN WITNESS WHEREOF, the RELEASOR has executed this RELEASE on the _____day of _____, 2003.
(For a Corporation)
_____ By: _____
Attest: Name:
Title:
(For an individual)
_____ _____(SEAL)
WITNESS:
_____ _____(SEAL)
Both Releasor and Releasee will sign, in the form required (corporation or individual)

NACHI SM

National Association of Certified Home Inspectors

The best home inspectors in the world

www.NACHI.org