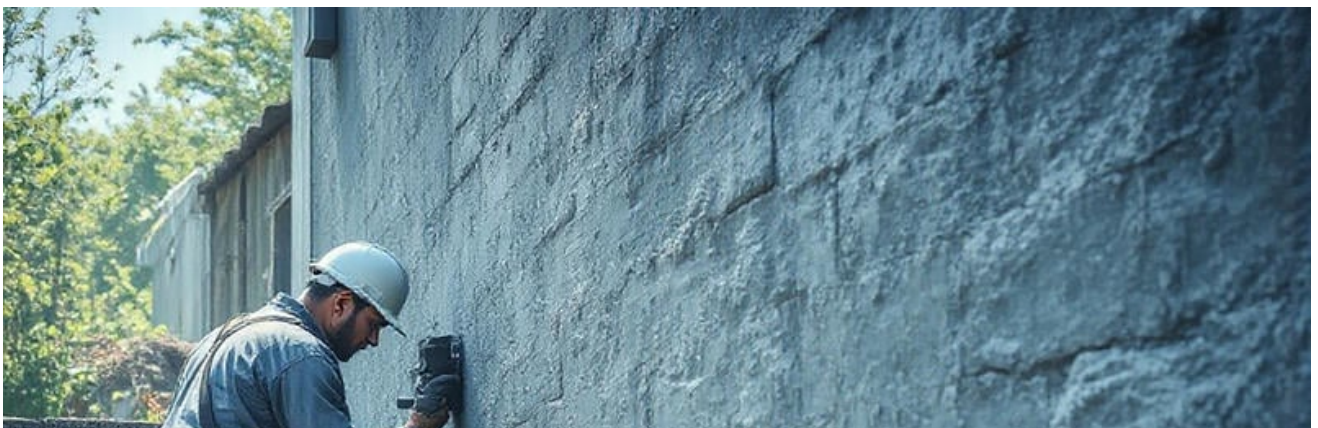




- **Understanding Shifting Soils in Changing Seasons**
Understanding Shifting Soils in Changing Seasons Early Signs of Drainage Issues in Wet Climates Identifying Freeze and Thaw Patterns in Foundation Movement Monitoring Summer Drought Effects on Concrete Recognizing the Role of Poor Grading in Soil Settlement Observing Spring Rains That Affect Foundation Stability Evaluating Temperature Fluctuations and Their Impact on Slab Integrity Addressing Expanding Clay in Variable Weather Managing Water Accumulation Around Foundation Walls Tracking Seasonal Rainfall Data for Preventive Measures Comparing Different Regional Climate Patterns for Foundation Health Avoiding Oversaturation With Proper Yard Drainage
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Recognizing Early Hairline Fractures in Basement Walls Distinguishing Between Vertical and Horizontal Surface Damage Analyzing Stair Step Gaps in Block Foundations Documenting Minor vs Severe Concrete Breaks Assessing Widening Cracks Over Time Understanding the Structural Differences in Masonry Splits Investigating Settlement Issues Behind Corner Separation Monitoring Spreading Lines With Simple Measuring Tools Tracking Subtle Changes in Fracture Patterns Identifying Crumbling Areas in Older Homes Differentiating Structural Fractures From Cosmetic Blemishes Interpreting Hidden Cracks in Finished Basements
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Understanding Shifting Soils in Changing Seasons

Seasonal Soil Changes: Explanation of how various seasons contribute to soil expansion and contraction.

The earth beneath our feet is not as static as it might seem. Basement leaks often indicate crack presence **Repair Basement Waterproofing** Nashville. It breathes, shifts, expands, and contracts with the rhythm of the changing seasons. This dynamic nature of soil is a fascinating subject that holds significant implications for agriculture, construction, and environmental management. Understanding how seasonal variations influence soil behavior can reveal much about the broader ecosystem and guide us in making informed decisions regarding land use.

As winter draws its icy curtain over the landscape, the soil undergoes contraction. The cold temperatures cause water within the soil to freeze, leading to an expansion of ice crystals which can push soil particles apart initially. However, in deeper layers where freezing does not occur or is minimal, soils contract due to reduced biological activity and lower moisture levels. This contraction can lead to increased density in certain types of soil and potentially create deep cracks or fissures on the surface.

As spring arrives with its thawing warmth, these frozen soils begin to expand. The melting ice increases moisture content significantly; coupled with rising temperatures, this leads to swelling in clay-rich soils particularly prone to expansion when wet. Spring also heralds a time of vigorous biological activity; roots grow more aggressively and microbial communities flourish, contributing further to soil movement as they aerate

and break down organic material.

Summer's heat continues this trend but introduces another layer of complexity. With high evaporation rates sucking moisture from the ground faster than it can be replenished by rainfall in many regions, soils—especially those rich in clay—begin to contract once more. This drying out process leaves behind desiccated clumps that shrink away from one another, often creating noticeable cracks across fields and garden beds alike.

Autumn enters gently at first but soon brings heavy rains which saturate the parched summer earth again. During this season, soils may experience slight expansion as they absorb rainfall; however, with temperatures dropping progressively towards winter again, these changes are less pronounced than those seen in spring.

The cycle of expansion and contraction is not merely an academic curiosity—it has real-world consequences that must be managed carefully. For example, understanding these shifts is crucial for construction engineers who need stable foundations for buildings that won't crack under pressure from moving earth. Farmers too must pay close attention; knowing when their fields might swell or shrink helps them plan planting schedules and irrigation strategies effectively.

Moreover, recognizing seasonal soil changes aids environmentalists working on conservation projects aimed at preserving natural habitats sensitive to disturbances caused by shifting ground conditions.

In conclusion, while we walk upon seemingly solid ground each day without much thought about its movements beneath us—seasonal rhythms ensure that our planet remains lively even at its most fundamental level: where rock meets life-giving dirt teeming with possibilities shaped by weather patterns above it all year round!

Understanding these cycles better equips us both practically—for managing resources wisely—and philosophically—in appreciating how interconnected our lives are with Earth's own natural dance through time's ever-turning wheel marked out by seasons' change over eons past into future unknown yet always unfolding anew today just beyond horizon's edge awaiting discovery tomorrow still uncharted until explored together hand-in-hand forging paths anew amidst shifting soils forever transformed yet eternally grounded here now always becoming something more grander envisioned possible before now dreamed realized living breathing world alive vibrant ever-changing home shared cherished beloved everyone alike joined one singular journey united diverse multitude boundless potential limitless horizons beckoning onward forth towards brighter tomorrows ahead beckons calls invites welcomes embraces celebrates all humanity whence come belong part whole greater vast universe infinite wonder awe
mystery beauty love peace harmony

Identifying Foundation Issues: Signs and symptoms of foundation damage caused by shifting soils. —

- Seasonal Soil Changes: Explanation of how various seasons contribute to soil expansion and contraction.
- Identifying Foundation Issues: Signs and symptoms of foundation damage caused by shifting soils.
- Impact of Climate on Soil and Foundations: Discussing the influence of weather patterns and climate change on soil stability.
- Methods for Monitoring Soil Movement: Techniques and tools used to track soil shifts around foundations.

- Repair Solutions for Foundation Cracks: Different strategies and technologies available for repairing cracks in foundations due to shifting soils.
- Preventative Measures: Tips for homeowners to minimize the risk of foundation damage from seasonal soil changes.
- Case Studies and Real-Life Examples: Examination of past incidents where shifting soils led to significant foundation issues and subsequent repairs.

Understanding the nuanced interplay between shifting soils and foundation integrity is crucial for homeowners, builders, and anyone invested in the longevity of structures. Shifting soils are a natural phenomenon influenced by changing seasons, which can lead to significant foundation issues if not properly addressed. Recognizing the signs and symptoms of foundation damage caused by these soil movements is essential in mitigating potential hazards.

Shifting soils occur due to variations in moisture content, temperature fluctuations, and other environmental factors that change with the seasons. During periods of heavy rain or snowmelt, the soil absorbs excess water and expands.

Understanding Shifting Soils in Changing Seasons – police inspector

1. Water damage
2. wall
3. structural failure

Conversely, during dry spells or droughts, the soil loses moisture and contracts. This constant expansion and contraction create a dynamic environment that can wreak havoc on foundations.

One of the most telling signs of foundation issues is the appearance of cracks in walls or floors. These cracks often start small but can widen over time as the underlying problems intensify. Vertical cracks might indicate normal settling; however, horizontal or diagonal cracks suggest more severe structural shifts that require immediate attention.

Doors and windows that suddenly become difficult to open or close are another symptom of a compromised foundation. As shifting soils cause uneven settling, frames may warp or shift out of alignment. This misalignment serves as an early warning sign that should not be ignored.

Uneven or sloping floors within a home are further indicators of potential foundation trouble. While some level of floor settling is expected in any building over time, noticeable inclines can point to underlying support issues exacerbated by moving soils.

Beyond visible damage inside a structure, examining external elements can also provide insight into foundation stability. Gaps between exterior walls and adjoining structures like chimneys or porches often signal movement below ground level. Additionally, leaning retaining walls or fences might reflect foundational stress due to soil displacement.

To mitigate these risks effectively, it's important for property owners to conduct regular inspections and maintenance checks throughout changing seasons. Addressing drainage problems promptly—such as clearing gutters or installing French drains—can prevent water accumulation near foundations during wet months. Likewise, employing techniques like deep-root watering systems during dry periods helps maintain consistent soil moisture levels around foundations.

In conclusion, understanding how shifting soils affect foundations is critical for safeguarding structural integrity against seasonal changes. By recognizing early warning signs such as wall cracks or sticking doors—and taking proactive measures—the impact on homes' long-term stability can be significantly reduced while ensuring safety for occupants within them year-round.

United Structural Systems in Social Media

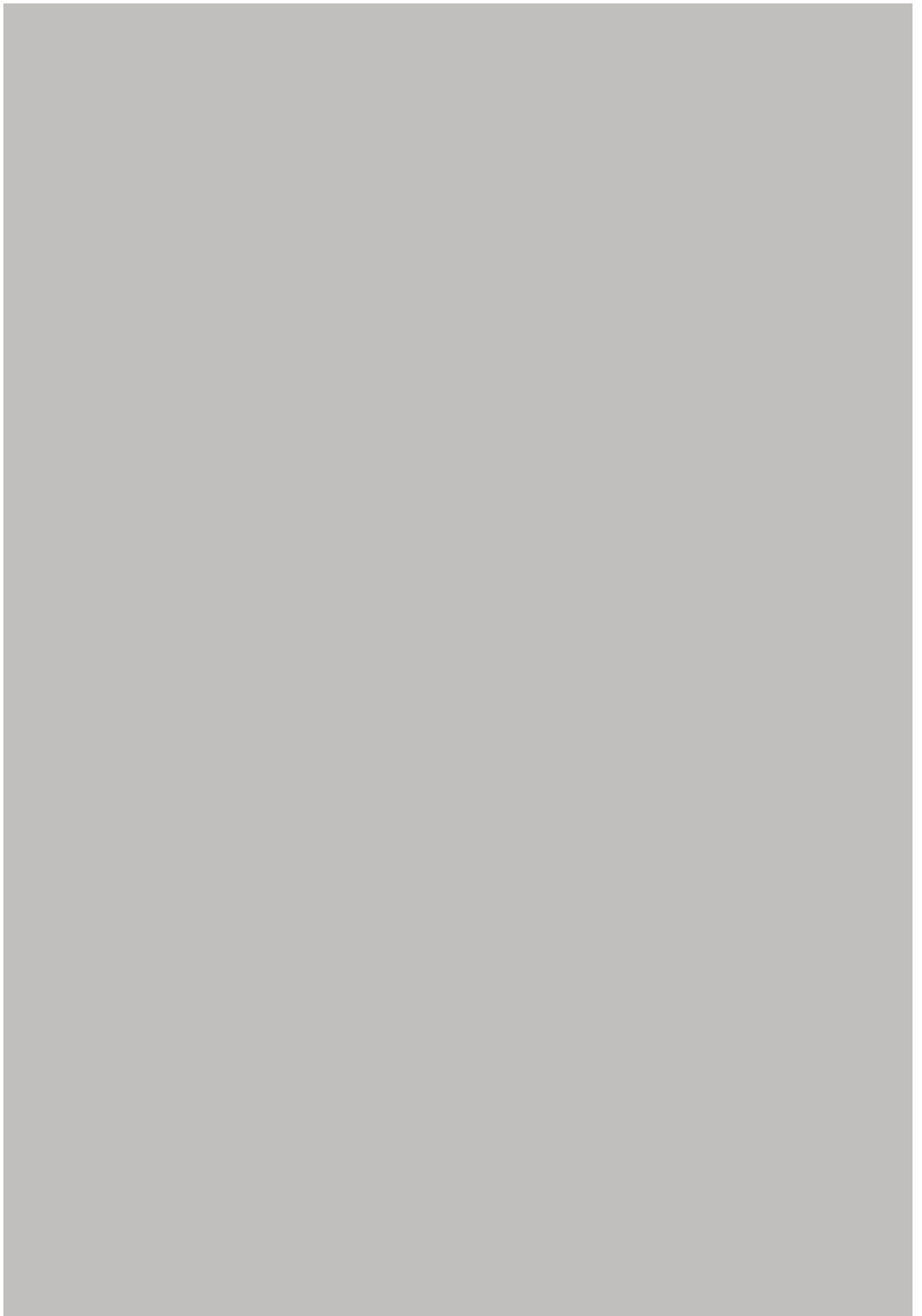
foundation crack repair service

United Structural Systems of Illinois on Yelp

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How to reach us:

foundation crack repair



Posted by on

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Posted by on

Impact of Climate on Soil and Foundations: Discussing the influence of weather patterns and climate change on soil

stability.

The impact of climate on soil and foundations is a topic of growing importance as global weather patterns continue to evolve. Understanding the shifting nature of soils in changing seasons requires an appreciation of how climate change can influence soil stability, impacting everything from agriculture to construction.

Climate change has introduced a complexity in weather patterns that directly affects soil conditions. As temperatures rise and precipitation patterns shift, the natural moisture content and composition of soils are altered. In regions experiencing increased rainfall, soils may become overly saturated, leading to reduced stability. This saturation can cause foundational issues for buildings and infrastructure as the ground beneath becomes less able to support weight, increasing the risk of subsidence or landslides.

Conversely, areas afflicted by prolonged droughts face different challenges. Dry conditions can lead to soil contraction, particularly in clay-rich soils which are prone to shrinkage when deprived of moisture.

Understanding Shifting Soils in Changing Seasons – sump pump

1. music hall
2. drainage
3. erosion

This shrinkage can result in cracks forming within the soil structure, posing risks to foundations built upon them. Buildings might suffer from uneven settling or even structural damage if these changes go unchecked.

Seasonal variations also play a critical role in soil behavior. During colder months, freeze-thaw cycles can exacerbate existing vulnerabilities within the soil matrix. Soil expansion during freezing periods followed by contraction upon thawing can destabilize structures over time—a process known as frost heave that is particularly concerning in temperate climates.

Moreover, extreme weather events such as hurricanes or floods compound these issues by causing rapid shifts in soil conditions. The sudden influx of water can lead to erosion or wash away topsoil layers entirely, leaving foundations exposed and vulnerable.

Adapting to these changes requires innovative engineering solutions and proactive land management practices. Construction techniques must evolve to incorporate materials that better accommodate shifting soils or mitigate their effects through improved drainage systems and flexible foundation designs.

Furthermore, understanding local climate trends is crucial for predicting future impacts on soil stability. Engineers and planners need access to accurate models that forecast how regional climates will change over time so they can design infrastructure resilient enough to withstand these shifts.

In conclusion, climate change significantly influences soil stability across diverse environments and seasons. The interplay between increased rainfall, extended dry spells, temperature fluctuations, and extreme weather events creates complex challenges for maintaining stable foundations. Addressing these issues proactively through science-driven strategies will be essential for safeguarding both natural ecosystems and human-built environments against the uncertainties posed by our changing world.





Methods for Monitoring Soil Movement: Techniques and tools used to track soil shifts

around foundations.

Understanding shifting soils is crucial for maintaining the structural integrity of buildings and other infrastructure. As seasons change, soil movement can pose significant risks to foundations, leading to costly damage if not properly monitored and managed. This essay explores various methods for monitoring soil movement, focusing on the techniques and tools used to track soil shifts around foundations.

Soil movement is influenced by several factors, including moisture content, temperature fluctuations, and human activities. During wet seasons, soil tends to expand as it absorbs water, while in dry conditions, it contracts. These changes can cause differential settlement or heaving of foundations. Therefore, monitoring these movements is essential for early detection of potential issues.

One common technique for tracking soil movement is the use of inclinometers. These instruments are installed vertically into the ground and measure horizontal displacement within the soil over time. By providing data on how much and in which direction the soil has shifted, inclinometers help engineers assess the stability of a foundation and predict future movements.

Another effective method involves using settlement markers or plates placed at strategic locations around a foundation. These devices allow for precise measurement of vertical movement by noting any changes in elevation over time. Regular readings from these markers can indicate whether a foundation is settling unevenly, alerting property owners to take corrective action before serious damage occurs.

Geotechnical sensors also play a vital role in monitoring soil conditions. These sensors can measure parameters such as moisture content, pore water pressure, and temperature within the soil. By analyzing this data alongside environmental conditions like rainfall or drought periods, experts can gain insights into how seasonal changes impact soil behavior.

Furthermore, advanced technologies like satellite remote sensing have revolutionized how we monitor large-scale ground movements. Techniques such as Interferometric Synthetic Aperture Radar (InSAR) provide detailed images that reveal subtle deformations in the Earth's surface over vast areas with high precision. This allows for continuous observation without requiring physical presence at each site.

Finally, Geographic Information Systems (GIS) enhance our understanding of shifting soils by integrating various datasets into visual maps that depict spatial patterns of land deformation across different regions during specific seasons or events such as earthquakes or floods.

In conclusion, effectively monitoring shifting soils requires employing a combination of traditional tools alongside modern technological advancements tailored specifically towards understanding seasonal dynamics affecting foundation stability worldwide today more than ever before due increasing climate variability impacts upon natural systems everywhere alike now too much indeed already sometimes unfortunately often enough really sadly but true nevertheless always important never forgetful either way still nonetheless yet again ultimately overall conclusively thus finally so forth henceforth thereby thereto therefore consequently inevitably eventually ultimately essentially fundamentally inherently intrinsically naturally ordinarily typically generally universally practically virtually almost entirely altogether wholly completely fully totally utterly absolutely perfectly thoroughly soundly firmly solidly confidently reliably dependably assuredly securely safely certainly guaranteed surely unquestionably beyond doubt indisputably irrefutably undeniably incontestably incontrovertibly unarguably unequivocally categorically undisputedly conclusively definitively decisively positively affirmatively determinedly resolvedly steadfastly staunchly unfalteringly unwaveringly

unshakably immovably adamantly resolutely stubbornly obstinately pertinacious
pertinaciousness persistence perseverance tenacity determination firmness resolve
steadfastness constancy loyalty devotion dedication commitment diligence industry
exertion labor endeavor effort application assiduity attentiveness heedfulness
mindfulness carefulness meticulousness scrupulousness conscientiousness punctiliousness
exactitude precision accuracy correctness faithfulness reliability trustworthiness
dependability certainty sureness assuredness confidence conviction belief credence
reliance expectation anticipation hope optimism assurance encouragement consolation
solace comfort relief reassurance

Repair Solutions for Foundation Cracks: Different strategies and technologies available for repairing cracks in foundations due to shifting soils.

Understanding the intricate dance between shifting soils and foundation stability is crucial, especially as seasons change and environmental conditions fluctuate. Foundations

are the bedrock of any structure, providing essential support to ensure buildings stand tall and resilient. However, when soils beneath these foundations shift due to changes in moisture levels, temperature variations, or even seismic activity, cracks can develop. Addressing these foundation cracks requires a keen understanding of both the underlying causes and the diverse range of repair solutions available.

Shifting soils are often a direct consequence of seasonal changes. During wet seasons, soil absorbs moisture and expands, while during dry spells, it contracts as water content decreases. This cyclical expansion and contraction can place immense pressure on foundations, leading to cracks that compromise structural integrity. Additionally, temperature fluctuations can exacerbate this issue; freezing conditions cause soil to expand as water turns to ice, while warmer temperatures reverse this process.

Recognizing the signs of foundation distress early is key to preventing further damage. Cracks in walls or floors, doors that jam or fail to latch properly, and sloping floors are all potential indicators that the foundation may be compromised due to shifting soils. Once identified, addressing these issues promptly with appropriate repair solutions is vital.

Several strategies exist for repairing foundation cracks caused by shifting soils. One common approach is underpinning—reinforcing the existing foundation by extending it deeper into more stable soil layers or using piers made from steel or concrete. This method provides additional support and helps stabilize the structure against further soil movement.

Another effective technology involves slab jacking or mudjacking—a process where a grout mixture is injected beneath a sunken slab to raise it back to its original position. This technique efficiently fills voids caused by soil erosion or compaction underneath concrete slabs without requiring extensive excavation.

For less severe cases where cracks are minimal but still problematic over time, epoxy injections offer a viable solution. This method involves injecting an epoxy resin into the cracks under high pressure to bond them together permanently while restoring structural strength.

Advancements in technology have also introduced helical piers—steel shafts with helical plates used for deep foundational support—that are particularly effective in unstable soils with high clay content prone to significant expansion and contraction cycles.

Understanding Shifting Soils in Changing Seasons – home inspection

1. police inspector
2. sump pump
3. home inspection

Ultimately, selecting an appropriate repair strategy depends on several factors including severity of damage observed thus far along with budgetary constraints homeowners face when addressing these critical concerns head-on before they escalate beyond control entirely over time if left unchecked indefinitely through neglectful oversight alone rather than proactive intervention measures taken sooner rather than later instead whenever possible ideally speaking overall generally considered preferable practice among industry professionals alike today right now currently ongoing worldwide across multiple geographic regions simultaneously at once concurrently happening everywhere simultaneously altogether combined collectively unified effort aimed towards achieving optimal results desired ultimately finally concluding successfully reaching satisfactory resolution attained achieved accomplished completed fulfilled realized implemented executed delivered performed provided supplied given made done finished finalized concluded wrapped up ended terminated ceased halted stopped brought closure conclusion end point destination endpoint goal objective aim target purpose mission

vision dream aspiration hope wish desire longing yearning ambition intention plan project proposal initiative scheme blueprint design outline framework model system program course action procedure operation undertaking venture enterprise endeavor campaign drive movement quest journey expedition tour trip voyage exploration adventure odyssey pilgrimage trek march procession parade rally excursion outing jaunt jaunt spree frolic romp escapade caper lark stunt prank antic joke jest gag trick hoax ruse ploy stratagem tactic maneuver plot scheme conspiracy collusion intrigue machination manipulation subterfuge deceit deception fraud scam swindle racket hustle con game charade sham pretense facade front disguise cover cloak



Preventative Measures: Tips for homeowners to minimize the risk of foundation damage from seasonal soil changes.

Understanding shifting soils in changing seasons is crucial for homeowners who wish to protect one of the most vital components of their property: the foundation. The stability and integrity of a home's foundation can significantly be impacted by seasonal soil changes, leading to potentially costly repairs if preventative measures are not taken. This essay explores ways homeowners can minimize the risk of foundation damage through proactive strategies.

Seasonal soil changes often result from variations in temperature and precipitation, affecting soil moisture levels. During wet seasons, soils tend to expand as they absorb water, while dry seasons cause soils to contract due to moisture loss. This constant expansion and contraction cycle can exert pressure on foundations, leading to cracks and structural instability.

One effective method for minimizing foundation damage is ensuring proper drainage around the home. Homeowners should regularly inspect gutters and downspouts, ensuring they are free from debris and functioning correctly. It's essential that rainwater is directed away from the foundation to prevent excess moisture accumulation. Installing extensions on downspouts or creating a slope around the home's perimeter can help achieve this goal.

In addition to managing water flow, maintaining consistent soil moisture levels throughout the year is crucial. During dry periods, watering the soil around your home helps prevent excessive shrinkage and subsequent stress on the foundation. However, it's important not to overwater as too much moisture can be equally damaging. A balanced approach involves using soaker hoses or drip irrigation systems that provide an even distribution of water without oversaturating the ground.

Moreover, homeowners can benefit from planting vegetation strategically around their properties. Trees and shrubs with extensive root systems should be planted at a safe distance from the house since their roots can draw moisture away from surrounding soils or potentially disrupt underground structures. Instead, opt for smaller plants or ground covers that require less water and have less invasive root systems.

Regular inspection of your home's foundation for signs of distress is another crucial preventative measure. Look out for visible cracks in walls or floors, doors that stick or fail to close properly, and any apparent tilting or sinking areas around your property. Early detection allows for prompt intervention before minor issues escalate into significant problems.

Lastly, consulting with a professional may be necessary when dealing with challenging soil conditions or existing foundational issues. Foundation experts offer valuable insights into specific risks associated with regional soil types and climate patterns unique to particular

geographic areas.

In conclusion, understanding how shifting soils interact with seasonal changes empowers homeowners to take proactive steps in safeguarding their property foundations against potential damage. Through diligent maintenance practices such as proper drainage management, consistent moisture control techniques combined with strategic landscaping choices—and remaining vigilant about early warning signs—homeowners can significantly reduce risks associated with fluctuating soil conditions while preserving both peace of mind along with long-term structural stability within their homes.

**Case Studies and Real-Life
Examples: Examination of past
incidents where shifting soils
led to significant foundation
issues and subsequent repairs.**

Understanding shifting soils in changing seasons is crucial for anyone involved in construction, landscaping, or property maintenance. The earth beneath us is not static; it moves and changes with the seasons, often in ways that can have significant implications for building foundations. Through examining past incidents where shifting soils led to major foundation issues, we can gain valuable insights into how these problems arise and what can be done to mitigate them.

One notable case study involves a residential development in Texas, where expansive clay soils caused widespread foundation distress among newly built homes. In this region, the soil undergoes significant expansion during wet seasons and contraction during dry spells. This cyclical movement creates enormous pressure on building foundations. Many homeowners began noticing cracks in their walls and uneven floors just months after moving in. Upon investigation, engineers found that insufficient attention had been given to soil conditions before construction began. The subsequent repairs required extensive underpinning of foundations and installation of moisture management systems around the homes.

Another example comes from California's San Joaquin Valley, where agricultural practices have significantly impacted local soil conditions. Over-extraction of groundwater has led to subsidence—where the ground level drops as soil compacts—which has affected roads, bridges, and buildings alike. One warehouse facility experienced severe structural damage due to uneven settling of its foundation over time. Engineers had to employ a combination of grouting techniques and deep pilings to stabilize the structure effectively.

In Canada, similar issues are observed but often linked to frost heave—a phenomenon prevalent in colder climates where frozen ground pushes upwards as it freezes and thaws with seasonal temperature changes. A public school in Ontario faced closure after structural assessments revealed dangerous shifts in its foundation due to frost heave cycles exacerbated by poor drainage design around the property. Remediation efforts included redesigning drainage systems and installing insulation barriers beneath new footings.

These examples highlight several critical lessons for managing foundation risks associated with shifting soils:

1. **Soil Analysis:** Prior thorough analysis of soil types and characteristics at a potential construction site can inform design choices that accommodate natural movements without compromising structural integrity.
2. **Design Adaptation:** Structures should be designed with flexibility in mind—incorporating features like adjustable piers or floating foundations that can adapt more readily to changes below ground.
3. **Water Management:** Effective control of water around structures—including proper drainage systems—is essential to prevent excessive moisture variation that leads to soil expansion or contraction.
4. **Continual Monitoring:** Ongoing monitoring through geotechnical assessments ensures any emerging issues are detected early before they lead to significant damage or costly repairs.

Ultimately, understanding shifting soils requires acknowledging their dynamic nature across different environments and climates—and designing accordingly. By learning from past incidents, such as those outlined above, engineers and builders can better anticipate challenges posed by changing seasons and implement strategies that safeguard against potential structural failures caused by soil movement.



About warranty

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The examples and perspective in this article **deal primarily with the United States and do not represent a worldwide view of the subject**. You may improve this article, discuss the issue on the talk page, or create a new article, as appropriate. *(September 2010) (Learn how and when to remove this message)*

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This article's lead section **may be too technical for most readers to understand**. Please help improve it to make it understandable to non-experts, without removing the technical details. *(March 2021) (Learn how and when to remove this message)*

In law, a **warranty** is an expressed or implied promise or assurance of some kind. The term's meaning varies across legal subjects.^[1] In property law, it refers to a covenant by the grantor of a deed.^[2] In insurance law, it refers to a promise by the purchaser of an insurance about the thing or person to be insured.^[3]

In contract law, a warranty is a contractual assurance given, typically, by a seller to a buyer,^[4] for example confirming that the seller is the owner of the property being sold.^[5] A warranty is a term of a contract, but not usually a condition of the contract or an innominate term, meaning that it is a term "not going to the root of the contract",^[6] and therefore only entitles the innocent party to damages if it is breached,^[6] i.e. if the warranty is not true,^[6] or the defaulting party does not perform the contract in accordance with the terms of the warranty. A warranty is not a guarantee: it is a mere promise. It may be enforced if it is breached by an award for the legal remedy of damages.

Depending on the terms of the contract, a product warranty may cover a product such that a manufacturer provides a warranty to a consumer with whom the manufacturer has no direct contractual relationship because it is purchased via an intermediary.

A warranty may be express or implied. An express warranty is expressly stated (typically, written); whether or not a term will be implied into a contract depends on the particular contract law of the country in question. Warranties may also state

that a particular fact is true at a point in time, or that the fact will continue into the future (a "continuing warranty").

Express warranty

[edit]

Main article: Express warranties

Express warranties are created when the seller makes a guarantee to the buyer that the product or service being offered has certain qualities. For there to exist an express warranty, a statement regarding the product or service must be made to the buyer and the statement must play a role in the buyer's decision to purchase the product or service. If, after purchase, the buyer feels that the given statement was a misrepresentation of the actual product or service, the buyer can file for breach of express warranty.^[7]

Implied warranty

[edit]

Main article: Implied warranty

Implied warranties are unwritten promises that arise from the nature of the transaction, and the inherent understanding by the buyer, rather than from the express representations of the seller.

Sale of goods

[edit]

Main article: Sale of goods

Warranties provided in the sale of goods (tangible products) vary according to jurisdiction, but commonly new goods are sold with implied warranty that the goods are as advertised. Used products, however, may be sold "as is" with no warranties. Each country, however, defines its own parameters with regard to

implied conditions or implied warranties. The rules regarding warranties are largely standardised; i.e., the concepts of *offer*, *acceptance*, *consideration*, *capacity to contract* and *intention to create legal relations*. Those are the five elements to create a legally binding contract in the United States (all 50 states), England and Wales, Scotland and Northern Ireland, each of the seven states of Australia, and all other common law countries. Countries with civil law systems, however, recognise legally binding contracts which are not supported by consideration.^[citation needed]

United States

[edit]

In the United States, various laws apply, including provisions in the Uniform Commercial Code which provide for implied warranties.^[8] However, these implied warranties were often limited by disclaimers. In 1975 the Magnuson–Moss Warranty Act was passed to strengthen warranties on consumer goods.^[9] Among other things, under the law implied warranties cannot be disclaimed if an express warranty is offered, and attorney fees may be recovered.^[9] In some states, statutory warranties are required on new home construction, and "lemon laws" apply to motor vehicles.

Article 2 of the Uniform Commercial Code, which has been adopted with variations in each state, provides that the following two warranties are implied unless they are explicitly disclaimed (such as an "as is" statement):

- The **warranty of merchantability** is implied unless expressly disclaimed by name, or the sale is identified with the phrase "as is" or "with all faults." To be "merchantable", the goods must reasonably conform to an ordinary buyer's expectations. For example, a fruit that looks and smells good but has hidden defects may violate the warranty if its quality does not meet the standards for such fruit "as passes ordinarily in the trade". In most states, products inherently come with implied warranty of merchantability; however, in states like Massachusetts under consumer protection law, it is illegal to disclaim this warranty on household goods sold to consumers. (Massachusetts General

Laws, Chapter 106: Section 2-316A)

- The **warranty of fitness for a particular purpose** is implied unless disclaimed when a buyer relies upon the seller to select the goods to fit a specific request. For example, this warranty is violated when a buyer asks a mechanic to provide tires for use on snowy roads and receives tires that are unsafe to use in snow.

Defects In Materials and Workmanship

[edit]

A common kind of warranty on goods is a warranty that the product is free from material defects in materials and workmanship. This simply promises that the manufacturer properly constructed the product, out of proper materials. This implies that the product is not defective for the purposes for which it was made.

Warranties may be time limited, thus limiting the time the buyer has to make a claim for breach of warranty. For example, a typical 90-day warranty on a television gives the buyer 90 days from the date of purchase to claim that the television was improperly constructed. Should the television fail after 91 days of normal usage, which because televisions customarily last longer than 91 days means there was a defect in the materials or workmanship of the television, the buyer nonetheless may not collect on the warranty because it is too late to file a claim. Consumer protection laws implemented by statute, however, provide additional remedies as it is not usually expected that a television will last for only 90 days.

Time-limited warranties are often confused with performance warranties. A 90-day performance warranty would promise that the television would work for 90 days, which is fundamentally different from promising that it was delivered free of defects and limiting the time the buyer has to prove otherwise. But because the usual evidence that a product was delivered defective is that it later breaks, the effect is very similar.

One situation in which the effect of a time-limited warranty is different from the effect of a performance warranty is where the time limit exceeds a normal lifetime of the product. If a coat is designed to last two years, but has a 10-year limited warranty against defects in materials and workmanship, a buyer who wears the coat for 3 years and then finds it worn out would not be able to collect on the warranty. But it is different from a 2-year warranty because if the buyer starts wearing the coat 5 years after buying it, and finds it wears out a year later, the buyer would have a warranty claim in Year 6. On the other hand, a 10-year performance warranty would promise that the coat would last 10 years.

Satisfaction guarantee

[edit]

In the United States, the Magnuson–Moss Warranty Act of 1976 provides for enforcement of a satisfaction guarantee warranty. In these cases, the advertiser must refund the full purchase price regardless of the reason for dissatisfaction.^[10]

Lifetime warranty

[edit]

A lifetime warranty is usually a warranty against defects in materials and workmanship that has no time limit to make a claim, rather than a warranty that the product will perform for the lifetime of the buyer.^[11] The actual time that product can be expected to perform is normally determined by the custom for products of its kind used the way the buyer uses it.

If a product has been discontinued and is no longer available, the warranty may last a limited period longer. For example:

- the Cisco Limited Lifetime Warranty currently lasts for five years after the product has been discontinued, but only if you know where you bought it from as the seller is responsible for administering it.^[12]

- HP Networking product lifetime warranties last for as long as one owns the product.^[13]

Limited warranty

[edit]

A warranty may be limited in duration (as above) and/or in scope. In *Avrora Fine Arts v Christie, Manson and Woods* (a UK High Court case), the auctioneers had issued a "limited warranty" that a certain painting sold at auction had been painted by the Russian painter Boris Kustodiev, which experts subsequently stated was not the case. The sale was cancelled and the buyer was reimbursed, but further claims of negligence and misrepresentation were denied because they fell outside the warranty's scope.^[14]

Breach of warranty

[edit]

Warranties are breached when the promise is not performed at all, or not performed in accordance with the contract. The seller may honor the warranty by making a refund or a replacement. The statute of limitations depends on the jurisdiction and contractual agreements. In the United States, the Uniform Commercial Code § 2-725 provides for a four-year time limit, which can be limited to one year by contract, starting from the date of delivery or if future performance is guaranteed from the date of discovery. Refusing to honor the warranty may be an unfair business practice. In the United States, breach of warranty lawsuits may be distinct from revocation of contract suits; in the case of the breach of warranty, the buyer's item is repaired or replaced while breach of contract involves returning the item to the seller.^[15]

Warranty label on top of a hard disk

Image not found or type unknown

Warranty label on top of
a hard disk

Warranty label lifted. The word "VOID" is shown multiple times

Image not found or type unknown

Warranty label lifted.
The word "VOID" is
shown multiple times.

Some warranties require that repairs be undertaken by an authorized service provider. In such cases, service by non-authorized personnel or company may void (nullify) the warranty. However, according to the Magnuson-Moss Act (a U.S. Federal law that governs warranties, which was passed in 1975), if the warranty does not provide full or partial payment of labor (to repair the device or system), it is the owner's choice who will provide the labor, including the possibility of DIY ("Do It Yourself") repairs, in which case the device or system owner will pay zero dollars for labor, yet the company that provided the warranty must still provide all the parts needed for the repair at absolutely no charge to the owner.

If the defective product causes injury, this may be a cause of action for a product liability lawsuit (tort). Strict liability may be applied.

Extended warranty

[edit]

In addition to standard warranties on new items, third parties or manufacturers may sell or offer extended warranties (also called service contracts).^[16] These extend the warranty for a further length of time. However, these warranties have terms and conditions which may not match the original terms and conditions. For example, these may not cover anything other than mechanical failure from normal usage. Exclusions may include commercial use, "acts of God", owner abuse, and malicious destruction. They may also exclude parts that normally wear out such as tires and lubrication on a vehicle.

These types of warranties are provided for various products, but automobiles and electronics are common examples. Warranties which are sold through retailers such as Best Buy may include significant commission for the retailer as a result of reverse competition.^[17] For instance, an auto warranty from a car dealership may be subcontracted and vehicle repairs may be at a lower rate which could compromise the quality of service. At the time of repair, out-of-pocket expenses may be charged for unexpected services provided outside of the warranty terms or uncovered parts. Extended Warranties are mostly back to back underwritten by underwriters, who are the actual bearer of the risk.

Representations versus warranties

[edit]

Further information: Misrepresentation

Statements of fact in a contract or in obtaining the contract are considered to be either warranties or representations. Traditionally, warranties are factual promises which are enforced through a contract legal action, regardless of materiality, intent, or reliance.^[18] Representations are traditionally *pre*contractual statements which allow for a tort-based action if the misrepresentation is innocent, negligent or fraudulent.^[19] In U.S. law, the distinction between the two is somewhat unclear;^[18] warranties are viewed as primarily contract-based legal action while negligent or fraudulent misrepresentations are tort-based, but there is a confusing mix of case law in the United States.^[18] In modern English law, sellers often avoid using the

term 'represents' in order to avoid claims under the Misrepresentation Act 1967 (although English law will look to the substance rather than the form of the representation to decide what it is), while in America 'warrants and represents' is relatively common.^[20] Some modern commentators suggest avoiding the words and substituting 'state' or 'agree', and some model forms do not use the words;^[19] however, others disagree.^[21]

Product types

[edit]

Appliance warranty

[edit]

Canada and United States

[edit]

Written warranties on new major appliances, such as refrigerators, kitchen stoves and dishwashers, usually cover the cost of parts and labor to repair defects in materials or workmanship which appear under normal home use.

Warranties often cover defects up to a year after purchase or delivery.^[22] However some exclude new owners when a house or appliance is sold within the year (Frigidaire,^[23] LG,^[24] Samsung^[25]). Others do let warranties transfer to new buyers (Amana,^[26] General Electric,^[27] Whirlpool). Some manufacturers cover refrigerators' sealed parts (compressors, tubing, etc.) for five years (General Electric,^[27] Samsung,^[28] Whirlpool)^[25] or seven years (LG^[24]) or ten years (KitchenAid^[29]).

Warranties on water heaters cover parts for 5 to 12 years in single family residences, one year otherwise. They do not cover new owners when a house or heater is sold; nor do they cover the original owner if the heater is moved to a

second location.^[30]^[31]^[32]^[33]^[34] Tank models from A. O. Smith do not allow heating elements to be replaced with lower (or higher) wattages, and do not cover renter-occupied single family. They end if the unit is flooded or ever uses desalinated or deionized water, such as municipal desalination plants or reverse osmosis filters.^[32]^[33] Smith's tank models for manufactured housing do not provide coverage if a whirlpool or hot tub is connected.^[33]

Tank water heater warranties exclude labor, liability for water damage, and shipping cost to return the old heater or parts. Tankless warranties do not exclude water damage; they cover labor for a year, and Ruud/Rheem covers return shipping on tankless models.^[31]^[34] Smith's tankless water heaters do not restrict coverage to a single family, and require professional installation.^[34]

Implied warranties under US law could extend for longer periods. However, most states allow the written warranties to include clauses which limit these implied warranties to the same time period as the written warranty.^[35]

Car warranty

[edit]

United States

[edit]

New car factory warranties commonly range from one year to five years and in some cases extend even 10 years, with typically a mileage limit as well. Car warranties can be extended by the manufacturer or other companies with a renewal fee.

Used car warranties are usually 3 months and 3,000 miles.

United Kingdom

[edit]

In the United Kingdom, types of warranties have been classified as either an:

1. original manufacturer warranty,
2. insurance warranty underwritten and regulated as insurance or
3. obligor warranty, typically written by a car dealership or garage.

In the United Kingdom, the Financial Conduct Authority (FCA), which began to regulate insurance contracts in this context in 2005, determined that additional warranties sold by car dealerships are "unlikely to be insurance".^[36] Insurance warranties may offer greater protection to the consumer.

Home Warranty

[edit]

Main article: Home warranty

A home warranty protects against the costs of home and appliance repair by offering home warranty coverage for houses, townhomes, condominiums, mobile homes, and new construction homes. When a problem occurs with a covered appliance or mechanical system such as an air conditioning unit or furnace, a service technician repairs or replaces it. The homeowner may have to pay for a service call fee and the home warranty company pays the balance for the repair or replacement of the covered item.

Intellectual property right warranty

[edit]

An intellectual property right (IPR) warranty provides contractual protection against breach of rights in software development and other fields where IPR is protected. Increasing reluctance on the part of suppliers to offer an IPR warranty or indemnity has been noted in recent years.^[37]

Warranty data

[edit]

Warranty data consists of claims data and supplementary data. Claims data are the data collected during the servicing of claims under warranty and supplementary data are additional data such as production and marketing data.^[38] This data can help determine product reliability and plan for future modifications.^[38]

See also

[edit]

- Business law
- Collateral TORT
- Consumer protection
- Due diligence
- Extended warranty
- Magnuson–Moss Warranty Act
- Surety
- Warranty deed
- Warranty tolling

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External links

[edit]

- Federal Trade Commission: Warranty Information (United States)

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National

- Germany
- Czech Republic

Other

- Encyclopedia of Modern Ukraine

About structural failure

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- Structural integrity and failure

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About United Structural Systems of Illinois, Inc

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Things To Do in Cook County

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South Shore Nature Sanctuary

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Chicago Portage National Historic Site

4.6 (157)

Photo

WNDR Museum

4 (3534)

Driving Directions in Cook County

Driving Directions From Country Inn & Suites by Radisson, Hoffman Estates, IL to United Structural Systems of Illinois, Inc

Driving Directions From Delia Aldridge MD to United Structural Systems of Illinois, Inc

Driving Directions From Comfort Inn Hoffman Estates - Schaumburg to United Structural Systems of Illinois, Inc

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Reviews for United Structural Systems of Illinois, Inc

United Structural Systems of Illinois, Inc

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Paul Gunderlock

(4)

The staff was helpful, very nice and easy to work with and completed the work timely and cleaned up well. Communications faltered a bit at times and there was an email communications glitch which was no fault of anyone, but no big deal and all ended up fine. We sure feel better to have this done and hope that is the end of our structural issues. It does seem like (after talking to several related companies), that it would be great if some of these related companies had a structural engineer on staff vs using on the job expertise gained over years – which is definitely valuable! But leaves a bit of uncertainty – and probably saves money for both sides may be the trade-off? So far, so good though! Thank you.

United Structural Systems of Illinois, Inc

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Dave Kari

(5)

What a fantastic experience! Owner Rick Thomas is a trustworthy professional. Nick and the crew are hard working, knowledgeable and experienced. I interviewed every company in the area, big and small. A homeowner never wants to hear that they have foundation issues. Out of every company, I trusted USS the most, and it paid off in the end. Highly recommend.

United Structural Systems of Illinois, Inc

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Sarah McNeily

(5)

USS was excellent. They are honest, straightforward, trustworthy, and conscientious. They thoughtfully removed the flowers and flower bulbs to dig where they needed in the yard, replanted said flowers and spread the extra dirt to fill in an area of the yard. We've had other services from different companies and our yard was really a mess after. They kept the job site meticulously clean. The crew was on time and friendly. I'd recommend them any day! Thanks to Jessie and crew.

United Structural Systems of Illinois, Inc

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Jim de Leon

(5)

It was a pleasure to work with Rick and his crew. From the beginning, Rick listened to my concerns and what I wished to accomplish. Out of the 6 contractors that quoted the project, Rick seemed the MOST willing to accommodate my wishes. His pricing was definitely more than fair as well. I had 10 push piers installed to stabilize and lift an addition of my house. The project commenced at the date that Rick had disclosed initially and it was completed within the same time period expected (based on Rick's original assessment). The crew was well informed, courteous, and hard working. They were not loud (even while equipment was being utilized) and were well spoken. My neighbors were very impressed on how polite they were when they entered / exited my property (saying hello or good morning each day when they crossed paths). You can tell they care about the customer concerns. They ensured that the property would be put back as clean as possible by placing MANY sheets of plywood down prior to excavating. They compacted the dirt back in the holes extremely well to avoid large stock piles of soils. All the while, the main office was calling me to discuss updates and expectations of completion. They provided waivers of lien, certificates of insurance, properly acquired permits, and JULIE locates. From a construction background, I can tell you that I did not see any flaws in the way they operated and this an extremely professional company. The pictures attached show the push piers added to the foundation (pictures 1, 2 & 3), the amount of excavation (picture 4), and the restoration after dirt was placed back in the pits and compacted (pictures 5, 6 & 7). Please notice that they also sealed two large cracks and steel plated these cracks from expanding further (which you can see under my sliding glass door). I, as well as my wife, are extremely happy that we chose United Structural Systems for our contractor. I would happily tell any of my friends and family to use this contractor should the opportunity arise!

United Structural Systems of Illinois, Inc

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Chris Abplanalp

(5)

USS did an amazing job on my underpinning on my house, they were also very courteous to the proximity of my property line next to my neighbor. They kept things in order with all the dirt/mud they had to excavate. They were done exactly in the timeframe they indicated, and the contract was very details oriented with drawings of what would be done. Only thing that would have been nice, is they left my concrete a little muddy with boot prints but again, all-in-all a great job

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