

LYNCOLE

XIT[®] GROUNDING

A DIVISION OF VFC

PRODUCT CATALOG

OVERVIEW



Lyncole continues to set the industry standard, just as we did with the originally patented, active, Lyncole XIT® Grounding System. Invented more than 40 years ago, each system we produce is maintenance free and comes with a 30-year warranty with an expected life span of more than 50 years. The complete line of all options available is discussed in further detail on pages 1-5. The Engineering Services guide, pages 20-21, will provide examples of how we can design a grounding system to meet your specific requirements and ways to implement our XIT Grounding System.

Lyncole also offers an array of products to accompany the XIT Electrolytic Grounding System such as, Lynconite II®, our proprietary backfill material, Grounding Gravel®, GRM 2000 RS, our Ground Resistance Monitoring System, and a variety of bus bars and cover boxes to fit your unique needs. This product catalog gives an in-depth look at each specific product and highlights the associated benefits. You will also learn practical applications and all options available to assist you with your project.

Along with our incomparable XIT system, Lyncole is proud to partner with Megger® and AEMC®, two of the industry's leaders in meter manufacturing. Both of these iconic companies are over 100 years old and provide the most advanced and reliable instruments manufactured today. From ground test meters, to HiPot testers, TDRs and megohmmeters, Lyncole can provide the industry best for your use.

We also work with industry leaders in surge suppression: PolyPhaser, Times Microwave, DEHN and others to provide you with the best choices.

As you can see, Lyncole provides key engineering services and education supported by our products and the products of industry leaders to provide you with the premier "One Stop Shop" for complete site protection. And this catalog is designed to guide you through the selection process.

LYNCOLE XIT[®] ELECTROLYTIC GROUNDING SYSTEMS

The continuously advancing telecommunications, computer and electronics industries require the most advanced grounding systems available. Ahead of its time, the UL-listed, self-moisturizing and maintenance free XIT[®] Grounding System provides low systems to earth resistance in diverse climates around the world, without harmful effects to the environment.

The Lyncole XIT Grounding System is available in "Straight Shaft" and also "L"-Shaped models for environments that don't allow a Straight Shaft installation. The "L"-Shaped model has the same features and benefits of the Straight Shaft model. As you will see on the following pages these models are fully customizable to meet any requirements. The diagram below is an example of how to read our catalog numbers for the XIT Grounding System.

K 2 L - 2 - 20 CS 4/0 D
1. 2. 3. 4. 5. 6. 7. 8.

1. **MATERIAL:** Copper (K) or Stainless Steel (SS).
2. **DIAMETER:** Internal diameter of the XIT electrode in inches.
3. **ROD STYLE:** L for an L-Shaped XIT electrode. Omit for a Straight Shaft.
4. **SECTIONS:** Number of sections. Omit for a single section.*
5. **LENGTH:** Total length of the electrode in feet.
6. **SYSTEM:** Insert CS for a Complete System including a protective cover box and backfill material, omit for a XIT electrode only. The complete system is also customizable.
7. **TAIL SIZE:** Tail conductor size 4/0 AWG, 2/0 AWG, #2 AWG Stranded, #2 AWG Tinned Solid, etc. Call for additional sizes. If omitted, 4/0 with a 24" length is the default conductor.
8. **ORIENTATION:** U for an Upward Running Tail, D for Downward, and P is for a Passthrough. If omitted, Downward is the default.

* Sections come in 10 and 20 foot lengths. Custom lengths available.

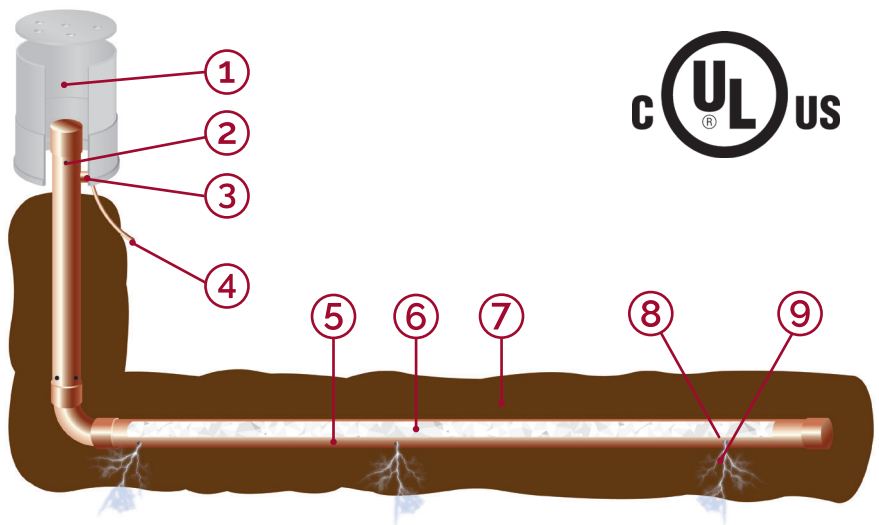
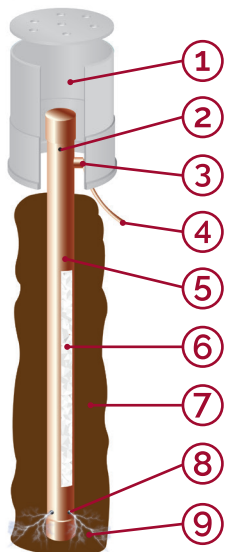
30-year / 25 Ohm maintenance-free full replacement warranty*

- Continuously UL listed since 1982
- The first and original patented electrolytic ground rod system
- Outside XIT rod diameter is 2-1/8 inches for copper and 2-3/8 inches for Stainless Steel
- The XIT rod walls are 0.083 inches thick for copper and 0.154 inches thick for stainless steel
- Active grounding system replenishes soil moisture, no watering is necessary after installation
- System performance improves over time as electrolytic roots form
- The XIT System offers stability, reducing seasonal fluctuation
- No hazardous materials or chemicals are used in producing the XIT rods
- Lynconite II® backfill material provides a pH balanced environment, inhibiting corrosion

*25 Ohm systems to ground resistance or better will be achieved in soils 100 Ohm resistance or lower

- ① Protective Cover Box
- ② Breather Holes
- ③ Exothermic Connection
- ④ Specified Tail Conductor

- ⑤ Copper or Stainless Steel Tube
- ⑥ Non-toxic Calsolyte® Salts
- ⑦ Lynconite II® Backfill Material
- ⑧ Weep Holes
- ⑨ Electrolytic Roots



LYNCOLE XIT[®] ELECTROLYTIC GROUNDING SYSTEMS

- X = Tail Conductor Size: **4/0** AWG, **2/0** AWG, **2** (#2 AWG stranded), **2T** (#2 AWG Tinned solid)
- D / U / P = Tail Orientation (Down, Up, or Pass-through), can also accommodate multiple tails
- Standard Complete Systems include a Fibrelyte Cover Box, Lynconite II[®] backfill, and an exothermically welded tail
- Custom configurations are available, please call for details
- Maintenance Free

XIT STRAIGHT SHAFT MODELS

CATALOG NO.	BACKFILL	TEST WELL	DESCRIPTION
K2-10CSXD	1 bag LNC II	XB-12F	10' Straight Shaft Complete System
K2-20CSXD	3 bags LNC II	XB-12F	20' Straight Shaft Complete System

XIT STAINLESS STEEL STRAIGHT SHAFT MODELS

SS2-10CSXD	1 bag LNC II	XB-12F	10' Straight Shaft Complete System
SS2-20CSXD	3 bags LNC II	XB-12F	20' Straight Shaft Complete System

XIT STRAIGHT SHAFT SECTIONAL MODELS

K2-2-20CSXD	3 bags LNC II	XB-12F	20' Straight Shaft Complete System two 10' Sections
K2-4-40CSXD	6 bags LNC II	XB-12F	40' Straight Shaft Complete System four 10' Sections
K2-2-40CSXD	6 bags LNC II	XB-12F	40' Straight Shaft Complete System two 20' Sections
K2-4-80CSXD	12 bags LNC II	XB-12F	80' Straight Shaft Complete System four 20' Sections

XIT L-SHAPED MODELS

K2L-10CSXD	2 bags LNC II	XB-12F	10' Horizontal length and 36" vertical riser
K2L-2-20CSXD	3 bags LNC II	XB-12F	20' Horizontal length and 36" vertical riser

STAINLESS STEEL XIT L-SHAPED MODELS

SS2L-10CSXD	2 bags LNC II	XB-12F	10' Horizontal length and 36" vertical riser
SS2L-2-20CSXD	3 bags LNC II	XB-12F	20' Horizontal length and 36" vertical riser

- X = Tail Conductor Size: **4/0** AWG, **2/0** AWG, **2** (#2 AWG stranded), **2T** (#2 AWG Tinned solid)
- D / U / P = Tail Orientation (Down, Up, or Pass-through), can also accommodate multiple tails
- Standard Complete Systems include a Fibrelyte Cover Box, Lynconite II® backfill, and an exothermically welded tail
- Custom configurations are available, please call for details
- Maintenance Free

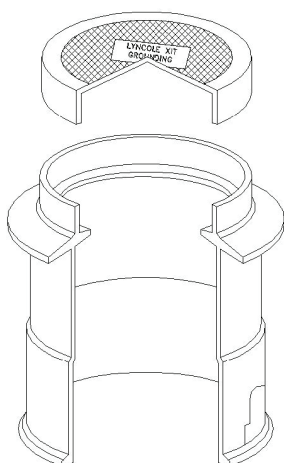
XIT STRAIGHT K2.5 **HEAVY DUTY** (35-YEAR MAINTENANCE FREE WARRANTY)

XIT STRAIGHT K3 **SUPER DUTY** (40-YEAR MAINTENANCE FREE WARRANTY)

CATALOG NO.	TEST WELL	BACKFILL	DESCRIPTION
K2.5-10CSXD	XB-12F	1 bag LNC II	10' Straight shaft model 2.5" Dia.
K2.5-20CSXD	XB-12F	1 bag LNC II	20' Straight shaft model 2.5" Dia.
K3-10CSXD	XB-12F	1 bag LNC II	10' Straight shaft model 3" Dia.
K3-2-20CSXD	XB-12F	3 bags LNC II	20' Straight shaft model, 2 sections, 3" Dia.
K3-2-40CSXD	XB-12F	6 bags LNC II	40' Straight shaft model, 2 sections, 3" Dia.

XIT **L-SHAPED** K2.5L **HEAVY DUTY** & K3L **SUPER DUTY** MODELS

K2.5L-10CSXD	XB-12F	2 bags LNC II	10' Horizontal length and 36" vertical riser, 2.5" Dia.
K2.5L-2-20CSXD	XB-12F	2 bags LNC II	20' Horizontal length and 36" vertical riser, 2.5" Dia.
K3L-10CSXD	XB-12F	2 bags LNC II	10' Horizontal length and 36" vertical riser, 3" Dia.
K3L-2-20CSXD	XB-12F	3 bags LNC II	20' Horizontal length and 36" vertical riser, 3" Dia.



LYNCOLE XIT[®] ELECTROLYTIC EARTH ENHANCEMENT PRODUCTS

Lyncole XIT[®] Grounding Systems include the XIT rod, electrolytic earth salts, a protective cover box with lid, and enough backfill material for a standard installation.

Each system is delivered with the appropriate amount of Lynconite II[®] which is the default backfill material for the following reasons:

- Lynconite II is extremely conductive, improving the performance of the grounding system.
- When Lynconite II is installed in its slurry form, it forms completely to the XIT electrode with no pockets or gaps, making an ideal connection between the grounding electrode and earth.
- Lynconite II has a nearly neutral pH. This protects the copper allowing Lyncole XIT Grounding to provide a 30 year warranty on the system.

Grounding Gravel[®], a pelletized form of backfill material is also available. It can be used as an alternative to mixing Lynconite II on site. Rather than mixing with water prior to installation, the pellets are poured in the hole or trench and then covered with water. Grounding Gravel can easily be installed in standing water. One 50 lb. bag of Grounding Gravel fills a smaller cubic area than one 50 lb. bag of Lynconite II, for this reason additional bags may be required.



LYNCONITE II®

THE IDEAL BACKFILL MATERIAL

CATALOG NO. WEIGHT CUBIC FEET PER BAG

LNC II 50 lb. 2.27

Lynconite II® is based on a natural earth clay. Special processing increases its electrical conductivity properties. With a resistivity of 0.6 ohms-meter it is extremely beneficial for earth grounding applications.

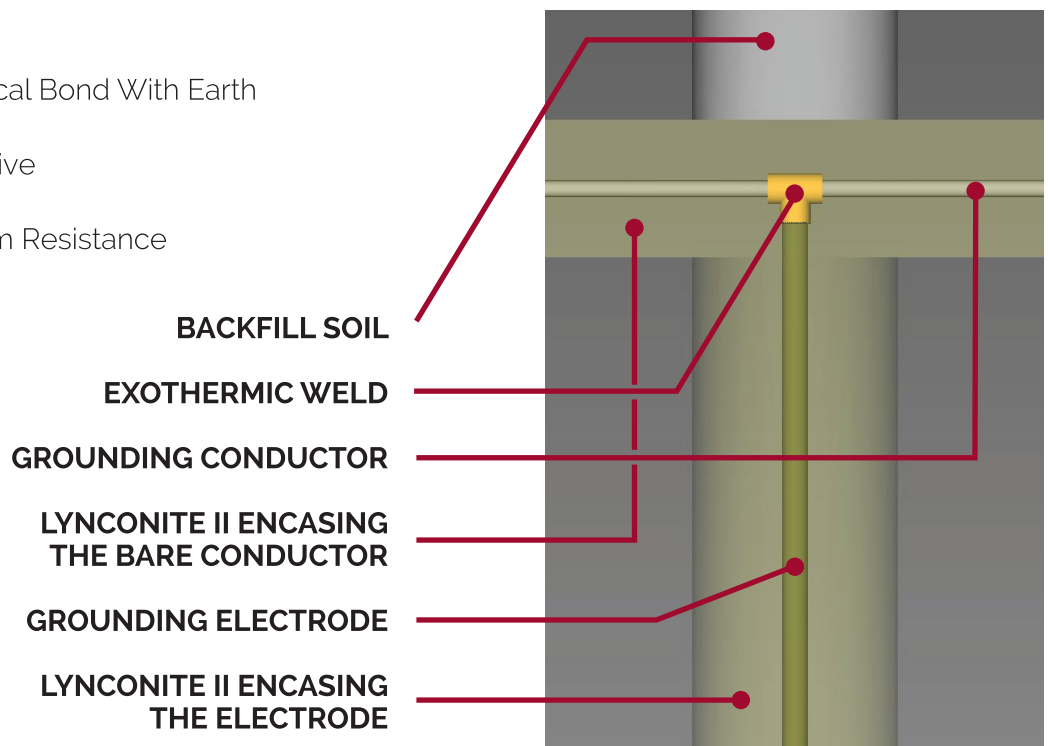
When mixed with water (approximately 13 gallons per 50 lb. bag) it has a relatively low viscosity for approximately 45 minutes before it takes on gel like properties. It is poured into the hole before it gels, then it adheres to the electrode and conforms to the holes dimensions, filling all voids, cracks and crevices, providing the best possible bond with the surrounding earth.

Lynconite II is environmentally safe, meeting NSF Standard 60 requirements.

Unlike carbon-based enhancement materials, Lynconite II does not place the grounding system in a corrosive environment. Lynconite II has a near neutral pH promoting a longer life span for any grounding system. You can use Lynconite II to extend the life of all electrodes and conductors, and it comes standard as part of the Lyncole XIT Grounding System. Because of the Lynconite II we are able to warranty the XIT electrode for 30 years and we expect it to have a life expectancy of greater than 50 years!

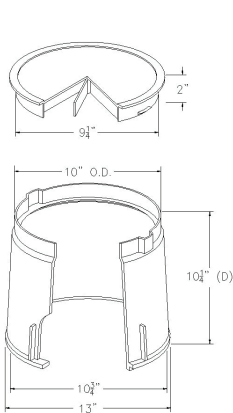
Benefits:

- Provides The Best Electrical Bond With Earth
- Environmentally Safe
- Very Electrically Conductive
- Protective Of Copper
- Lowers Grounding System Resistance

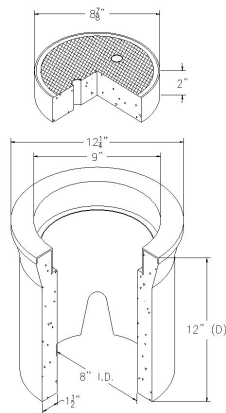


COVER BOXES

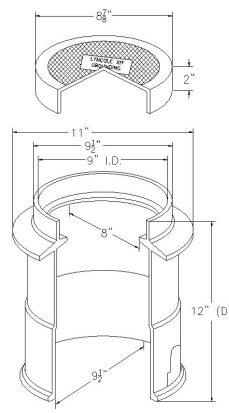
CATALOG NO.	WEIGHT WITH LID	MATERIAL	LIVE LOAD RATING	DESCRIPTION
XB-11	5 lb.	Polyplastic	350 PSF	10" (O.D.) x 10 1/4" (D), used for indoor or light traffic locations. Pedestrians
XB-12C	50 lb.	Concrete	8,000 PSF	8" (I.D.) x 12 1/4" (O.D.) x 12" (D) with cast iron lid labeled "Ground". H-10 Traffic Rated
XB-12F	9 lb.	Fibrelyte	8,000 PSF	9" (I.D.) x 11" (O.D.) x 12" (D), available in gray. H-10 Traffic Rated
XB-22C	67 lb.	Concrete	16,000 PSF	10" (I.D.) x 13 3/4" (O.D.) x 12" (D). Triangular concrete body, cast iron lid. H-20 Traffic Rated
XB-25C	61 lb.	Concrete	16,000 PSF	11 3/16" (I.D.) x 13 13/16" (O.D.) x 12" (D). Round concrete body, cast iron lid. H-20 Traffic Rated



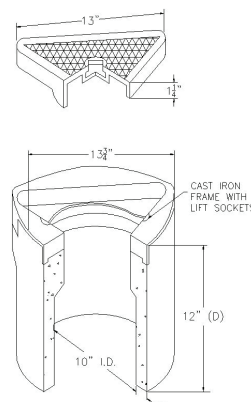
XB-11



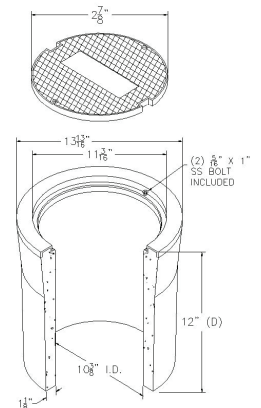
XB-12C



XB-12F



XB-22C



XB-25C